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IN THE MATTER OF:          )
                           )  Docket No.
DETERMINATION OF CABLE     )  14-CRB-0010-CD
ROYALTY FUNDS              )  (2010-2013)
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4   IN THE MATTER OF:)

5   )   Docket No.

6   DETERMINATION OF CABLE   ) 14-CRB-0010-CD

7   ROYALTY FUNDS   ) (2010-2013)

8   ------------------------X

9   BEFORE: THE HONORABLE SUZANNE BARNETT

10   THE HONORABLE JESSE M. FEDER

11   THE HONORABLE DAVID R. STRICKLER

12

13   Library of Congress

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20   VOLUME IX

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23   Reported by: Karen Brynteson, RMR, CRR, FAPR

24

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1   P R O C E E D I N G S

2   (9:07 a.m.)

3   JUDGE BARNETT: Good morning. Please

4   be seated.

5   Sorry. We are, as you can tell, down

6   to the wire on the sound system. For now, we

7   all have working mics, the old originals.

8   They're hooked up to some new speakers, and

9   this is really loud. I have to sit way back.

10   Shall we begin with the Canadian

11   Claimants this morning?

12   MR. SATTERFIELD: Yes.

13   JUDGE BARNETT: Mr. Satterfield?

14   MR. SATTERFIELD: We would like to

15   call our first witness, Dr. Frederick Conrad.

16   Before I begin, I just wanted to let you know

17   we do have a guest in the room today. We have

18   principals from the CBC, Canadian Broadcasting

19   Corporation, who organized the Canadian

20   Claimants Group, Janice de Freitas, Danielle

21   Boudreau, who would have been --

22   JUDGE BARNETT: You'll need to --

23   MR. SATTERFIELD: Do I have to press

24   -- yeah, okay. We have three guests in the

25   room. We have from the principals, the CBC,

1   Janice de Freitas; Danielle Boudreau, who would

2   have been our principal witness but she was

3   waived; and then Graeme Carbert.

4   JUDGE BARNETT: Thank you.

5   MR. SATTERFIELD: Having said that, I

6   would like to call Dr. Frederick Conrad.

7   JUDGE BARNETT: Any objection from

8   anyone to the Canadian broadcasting

9   representatives remaining in the room during

10   the testimony? Okay.

11   Well, I presume we have nothing that

12   is restrictive. Okay.

13   Please be careful of the snake pit

14   there. Before you sit, please raise your right

15   hand.

16   Whereupon--

17   FREDERICK CONRAD,

18   having been first duly sworn, was examined and

19   testified as follows:

20   JUDGE BARNETT: Please be seated.

21   MR. SATTERFIELD: There are now so

22   many wires running around, it looks like I am

23   on a TV set. We need to project a green screen

24   behind you and you guys could be doing the

25   news.

1   JUDGE BARNETT: We could be surfing.

2   (Laughter.)

3   MR. SATTERFIELD: True.

4   DIRECT EXAMINATION

5   BY MR. SATTERFIELD:

6   Q.   Dr. Conrad, would you please state

7   your full name and spell it for the record.

8   A.   Frederick George Conrad,

9   F-r-e-d-e-r-i-c-k.

10   Q.   And on whose behalf are you appearing

11   today?

12   A.   The Canadian Claimants Group.

13   Q.   Could you provide a summary of your

14   educational background, please?

15   A.   I have a Bachelor's degree in

16   cognitive science from Hampshire College in

17   Amherst, Massachusetts and a Ph.D. in cognitive

18   psychology from the University of Chicago, and

19   I was a postdoctoral fellow in psychology at

20   Carnegie Mellon University.

21   Q.   Where do you currently work?

22   A.   I work at the University of Michigan

23   in the Institute for Social Research.

24   Q.   And what all do you do at the

25   University of Michigan?

1 A. I'm -- I have really kind of three

2 hats. I'm a researcher, a survey methodology

3 researcher. I'm an instructor, a faculty

4 member, in our graduate program in survey

5 methodology called the Michigan Program in

6 Survey Methodology. And I'm the director of

7 that program so I have an administrative role.

8 Q. And what -- in particular, what

9 courses do you teach?

10 A. I teach a variety of courses in survey

11 methodology, mostly concerned with data

12 collection methods, best ways to collect data

13 that are high quality.

14 Q. And what type of research do you

15 conduct?

16 A. Most of my research is concerned with

17 better understanding how survey respondents

18 produce their answers when asked survey

19 questions, paying particular attention to the

20 mental or cognitive processes they go through,

21 and using this information to design better

22 methods.

23 Q. Do you conduct surveys yourself?

24 A. I do conduct surveys in the course of

25 this methodological research, so the surveys

1   that I conduct typically are not conducted for

2   what we call substantive purposes, but they

3   tend to be experiments that compare the outcome

4   of the surveys of two or more different

5   methods.

6   Q.   Now, where did you work -- did you

7   work someplace before the University of

8   Michigan?

9   A.   Right. I -- immediately before

10   Michigan, that is until 2002, I worked at the

11   Bureau of Labor Statistics here in Washington

12   in the survey methods research group. So the

13   Bureau of Labor Statistics collects statistical

14   information about the economy, mostly using

15   surveys. So survey methods are really a

16   central part of their mission.

17   Q.   Now, in front of you is a binder that

18   has -- it contains a document marked

19   Exhibit 4003, which has previously been

20   admitted into evidence.

21   Can you identify that document for the

22   record, please?

23   A.   Right. This is my written testimony

24   in this proceedings.

25   Q.   And did you prepare this exhibit?

1   A.   Yes.

2   Q.   Are there any corrections to this

3 exhibit?

4   A.   No.

5   Q.   And do you affirm that this is true

6 and correct?

7   A.   Yes.

8   Q.   Now, attached to your exhibit is a CV,

9 Appendix A. Is this correct?

10   A.   Yes.

11   Q.   And this lists the publications,

12 journals that you have worked as an editor?

13   A.   Yes. It contains publications and,

14 correct, the journals that I have been an

15 editor at, on the advisory board of.

16   Q.   Can you give us a sense of just how

17 many published journals you have produced?

18   A.   So I counted before I sent this CV,

19 submitted this CV, and there were 93

20 peer-reviewed articles that I was either first

21 author of or co-author of.

22   Q.   And the journals, do you serve on the

23 editorial boards of any journals?

24   A.   Yes, so, previously, I served on the

25 editorial board of a journal called the Journal

1 of Official Statistics. Currently, I'm on the

2 editorial board of Public Opinion Quarterly, as

3 well as on their advisory committee.

4   Q.   If you had to self-identify your sort

5 of area of specialty or expertise, what would

6 that be?

7   A.   I would say it's the cognitive aspects

8 of survey methodology, so the mental processes

9 that survey respondents go through when

10 producing their answers to survey questions.

11   Q.   And this is in the conduct of --

12 context of -- to build a survey methodology?

13   A.   Yes.

14   MR. SATTERFIELD: I would move that

15 Dr. Conrad be accepted as an expert in survey

16 methodology.

17   JUDGE BARNETT: Hearing -- excuse me

18 -- hearing no objection, Dr. Conrad is so --

19 Professor Conrad is so qualified.

20   MR. SATTERFIELD: Thank you.

21 BY MR. SATTERFIELD:

22   Q.   Dr. Conrad, do you have an

23 understanding of what this proceeding is about?

24   A.   Yes, this is the royalty allocation

25 proceedings for the various claimant groups --

1   various claimant groups in the cable royalty

2   case.

3   Q.   And do you have an understanding of

4   what the criterion is that the Copyright

5   Royalty Board uses to make these allocations?

6   A.   So, traditionally -- my understanding

7   is that traditionally the approach has been to

8   determine the marketplace value of the programs

9   that the various claimant groups claim.

10   Q.   And did you review the testimony of

11   Dr. Trautman and the Bortz report?

12   A.   Yes, I did.

13   Q.   And did you review the testimony of

14   Dr. Horowitz and the survey that he sponsored?

15   A.   Yes, I did.

16   Q.   And could you provide us an overview

17   of your -- of your views or takeaway after

18   having examined those studies?

19   A.   Yes. So the first thing I would want

20   to say is that it is much easier to critique a

21   survey than to conduct one, having been on the

22   other side. But my charge has been to critique

23   these surveys, but there is much to applaud in

24   the way these surveys were conducted. There is

25   a pretty thoughtful approach, I think.

1   My primary concerns fall into -- I

2   have four or five of them. So, first, the

3   number of participating cable systems that

4   carry a distant Canadian signal is quite small.

5   I think in the Bortz survey, it ranges over the

6   four years between 7 and 11 participating

7   systems, and in the Horowitz survey, between 1

8   and 8 systems over those years. And these are

9   small numbers of participants on which to base

10 estimates.

11   Second, the majority, I think the vast

12 majority, of participating cable systems don't

13 carry a distant Canadian signal and so aren't

14 asked about that. And yet in the analysis,

15 their responses are treated as if they are

16 assigning zero value to the Canadian signal.

17   This strikes me as a strange practice

18 in that they have never been asked about the

19 value of these systems. And it's capped at

20 zero, so even if they would have assigned value

21 had they been able to carry those signals,

22 there is no way for that to be reflected.

23   Q.   Well, if there is no survey -- if

24 there is no signal on the system to survey, I

25 mean, how would you -- how would you

1   characterize that -- that data or absence of

2   data, then?

3   A.   Well, I think it's missing data, and

4   the values could potentially be imputed from

5   the data that are collected, but it's -- it

6   doesn't seem appropriate to me to assume the

7   value would be zero.

8   I do have two other comments. One is

9   that the programming categories are not

10   entirely comparable. And this is because

11   several of the categories are -- group together

12   types of programming that are based on content,

13   sports, movies, serials, news, but two of the

14   categories, one the Canadian signals and Public

15   Television, are based on a property that the

16   programs share. And, namely, they're carried

17   on the Canadian signal or they're -- they're

18   educational or not for profit.

19   And psychological research has shown

20   that the latter type of category is not

21   typically how people spontaneously group

22   instances into categories.

23   And so if they're asked about what I

24   have called unnatural categories, it's very

25   hard to retrieve instances of those categories.

1   It's hard to bring them to mind. And this

2   leads to underestimation of the number -- the

3   size of those categories, which I believe in

4   this case could well bias downward the

5   valuation of the Canadian signal.

6   Q.   And the Public Television signal?

7   A.   And the Public Television signal, yes.

8   And then the final point I would make

9   is there is a well-established best practice in

10   survey methods of pre-testing questionnaires,

11   administering them to a small subset of sort of

12   plausible respondents to identify the way

13   respondents are interpreting the questions and

14   maybe difficulty they're having in answering

15   the questions.

16   All the federal statistical agencies

17   that conduct surveys have groups designed to do

18   exactly this. As far as I can tell, this

19   wasn't done for either of the Bortz or Horowitz

20   surveys.

21   Q.   And this is to get at what the -- how

22   the respondent is interpreting the language of

23   the question or the description of the

24   categories?

25   A.   Exactly. And so I do think that had

1   these pretests been conducted, some of these

2   other concerns I have raised might well have

3   been detected and could have been addressed.

4   Q.   Now, in the Horowitz study, they did

5   provide examples for the content categories.

6   Do these examples address your criticism?

7   A.   No, because the examples really -- for

8   example, of Canadian programming, really don't

9   bring to mind Canadian -- other Canadian

10   programs. They are -- the examples involve a

11   kids' show, a "life-style show," news. They

12   much more naturally go with the sort of

13   content-based categories.

14   So I don't think that the examples

15   address the unnatural category problem. Also I

16   think there are other concerns with the use of

17   categories in the Horowitz survey in that,

18   again, the literature suggests that examples

19   can help or they can hurt.

20   And it really depends on whether they

21   are bringing -- or have no impact. And it

22   really depends on whether they are bringing to

23   mind instances of a category that a respondent

24   hadn't thought about previously, because if

25   they are typical of -- if the examples are

1   typical of the category, then they're probably

2   not changing the respondent's thinking. The

3   respondent probably already had those examples

4   in mind.

5   Atypical examples have been shown to

6   be more effective in sort of helping the

7   respondents understand the scope of the

8   categories. As far as I can tell, the examples

9   that are provided in the Horowitz surveys were

10   not selected with these concerns in mind.

11   Q.   So now, these examples could either

12   enhance or detract from the value of the

13   category?

14   A.   Right. So if -- an example is very

15   low frequency, so, for example, let's say we're

16   talking about vegetables. If an example is

17   radishes, presumably an atypical or

18   low-frequency vegetable, that -- the literature

19   suggests that will bias downwards the -- these

20   studies that have to do with consumption of

21   food products.

22   That will bias downward the estimates

23   of consumption because it's bringing to mind

24   rare instances.

25   Q.   Earlier you raised the question or

1   raised the criticism of missing data. Now, the

2   Horowitz study did try to address the situation

3   of systems, including systems that carried only

4   Public Television or only Canadian television

5   signals.

6   Does that address in your -- some of

7   your criticisms of missing data?

8   A.   Well, so I applaud the effort.   I

9   think, though, that it's not clear those

10   questions were being interpreted as intended.

11   One piece of evidence being that for signals --

12   for systems that only carried a distant

13   Canadian signal or only carried a Public

14   Television signal, in only a few cases did the

15   respondents assign 100 percent value to that

16   one signal.

17   But this doesn't make sense because

18   there were no other signals over which to

19   distribute the percentages. So it suggests to

20   me that actually the attempt to collect

21   judgments from the systems that only carried a

22   Canadian signal were running into some kind of

23   problems. Respondents didn't understand the

24   wording, the task they had been assigned, they

25   felt they needed to make a comparison when they

1 really only had one signal.

2   So, again, I think if pre-testing had

3 been conducted, we could better understand why

4 this has happened or the wording might have

5 been adjusted so that this didn't happen, but

6 in the end I don't think this sufficiently

7 addressed the issue that you raise.

8   Q.   So in conclusion, do you believe that

9 the data, the data collected in the Bortz or

10 Horowitz study, can be relied upon to allocate

11 a value to the Canadian Claimants group?

12   A.   I don't. I have serious concerns,

13 which I guess I detail more in the written

14 testimony but have touched on with you here

15 today. I think that there are some

16 questionnaire design issues that may introduce

17 just noise, for example, in the case of a very

18 small number of participants, but may introduce

19 a bias, a systematic downward valuation of the

20 Canadian signal.

21   MR. SATTERFIELD: I have no further

22 questions.

23   JUDGE STRICKLER: Before we turn the

24 witness over -- good morning, Doctor?

25   THE WITNESS: Good morning.

1   JUDGE STRICKLER: A question for you

2   about pretest. If you pretest --

3   JUDGE BARNETT: Your microphone --

4   JUDGE STRICKLER: Sorry. If you

5   pretest, do you engage in sort of a passive

6   activity where you just find out whether or not

7   the respondents had problems or questions, or

8   is it also or alternatively an active endeavor

9   where you ask questions and if you had any

10   suspicions, for example -- by way of examples

11   that you testified to, would you say were these

12   examples helpful or not helpful --

13   THE WITNESS: Yeah.

14   JUDGE STRICKLER: -- or what have you?

15   So is it active, passive, or both?

16   THE WITNESS: Well, that's an

17   excellent question. It depends to some degree

18   on the pre-testing method. The one that's most

19   widely used, for example, in the federal

20   statistical agencies, is called cognitive

21   interviewing. And it's a mix of passive in the

22   sense that the interviewer or experimenter is

23   sort of hands-off but then takes a more active

24   role and probes to, say, uncover potential

25   problems.

1   So often the respondent is asked to

2   think out loud as they're answering a question.

3   This can reveal certain misunderstandings. But

4   maybe not definitively. And so the

5   interviewer -- these are generally not typical

6   survey interviewers; they're like social

7   scientists with advanced degrees -- will follow

8   their -- will sort of probe and try to uncover

9   problems and sort of take a more active role.

10   So it's a mix of the two.

11   JUDGE STRICKLER: Thank you.

12   JUDGE BARNETT: Professor, these

13   surveyors, I think both generally when they

14   appear here, they say: We pretested this. We

15   did a trial run or whatever.

16   What I hear you suggesting is that

17   there's an independent source of pre-testing.

18   Is it your opinion in general that these

19   self-run pretests are confirming bias or are --

20   is there something else going on?

21   THE WITNESS: So I guess I'm not clear

22   from the written testimony what kind of, you

23   know, pilot studies or probative studies --

24   JUDGE BARNETT: That's the word I was

25   looking for. Thank you.

1   THE WITNESS: -- yeah, were conducted.

2   But if they are passive, and if they're just

3   sort of like a dress rehearsal of the in-review

4   process, they're unlikely to uncover the kind

5   of problem that I'm talking about here.

6   So that's why, over the last several

7   decades, this practice of these -- they call

8   them lab interviews, people come into the

9   survey organization and are questioned in

10   detail or in-depth interviews. That's why this

11   practice has become widespread because really

12   -- because of the active component. It really

13   does allow one to pursue sort of suggestions of

14   problems.

15   JUDGE BARNETT: Thank you.

16   JUDGE STRICKLER: You say that -- just

17   a moment ago, you said the practice of

18   pre-testing has become widespread. Is there,

19   to your understanding, a standard in the

20   industry, in the survey industry, as to whether

21   or not pre-testing is required or is it -- or

22   is there no such standard?

23   THE WITNESS: Well, I would say that

24   it's -- it's -- I mean, we don't have standards

25   in the sense of, you know -- well, I take that

1   back.

2   There is a professional organization

3   that many survey professionals belong to, the

4   American Association for Public Opinion

5   Research. And it is their recommendation that

6   pre-testing be conducted uniformly.

7   JUDGE STRICKLER: So they categorize

8   it as a recommendation, not as a requirement?

9   THE WITNESS: Well, they have -- I

10   would say so. I actually don't know the exact

11   wording off the top of my head, but they have

12   no kind of leverage over their members, other

13   than to make a recommendation about practice.

14   JUDGE STRICKLER: Thank you.

15   JUDGE FEDER: Does that recommendation

16   apply in cases where the survey instrument

17   hasn't changed from a previous iteration of the

18   same survey?

19   THE WITNESS: Good question. I mean,

20   it depends if the -- if in the previous

21   iteration the survey was pretested. Even if

22   that's the case, interpretation of questions

23   changes over time. Words take on different

24   meaning, as the years pass. And so it's

25   certainly advisable to pretest even if it's the

1   identical questionnaire used some years later,

2   but it's particularly important if pre-testing

3   hadn't been done previously.

4   And there are many ongoing or

5   longitudinal studies that were begun before

6   pre-testing of this type was the norm. And so

7   they've subsequently pretested, I'm thinking of

8   several examples, and they're faced with a

9   dilemma. Do we change the questionnaire

10   mid-stream, you know, and disrupt the time

11   series or do we continue with what we know to

12   be imperfect questions?

13   JUDGE STRICKLER: I'm sorry, go ahead.

14   JUDGE FEDER: Why don't you go on,

15   because I was going to change topics slightly.

16   JUDGE STRICKLER: If it's a survey as

17   Judge Feder indicated that has been given

18   repeatedly over a period of years but the

19   questions have changed to some extent as the

20   survey has -- as developed over time, does that

21   increase, decrease the need for pre-testing or

22   have no effect on the need for pre-testing?

23   THE WITNESS: That would certainly --

24   if the question wording has changed at all,

25   that would certainly require pre-testing or

1   warrants pre-testing.

2   JUDGE STRICKLER: Thank you.

3   JUDGE FEDER: Going back to your first

4   critique about the -- imputing zero value for

5   Canadian signals to those survey respondents

6   that didn't carry Canadian signals, throughout

7   most of the United States you can't carry a

8   Canadian signal under the compulsory license.

9   There's just a band along the northern border

10   where that's permitted.

11   Would it be appropriate to impute a

12   non-zero value to survey respondents outside of

13   that 150-mile band?

14   THE WITNESS: It's a good question. I

15   don't know the answer entirely, but I think

16   that if the imputation is presented with

17   sufficient caveats and is based on the

18   similarity of systems that do carry a signal to

19   systems that don't carry a signal, that it

20   could at least be instructive.

21   So I am -- so is it appropriate? I

22   guess I would say it's at least worth exploring

23   and evaluating the appropriateness of it at

24   that time.

25   JUDGE FEDER: Thank you.

1   MR. SATTERFIELD: I just have one

2 follow-up question.

3 BY MR. SATTERFIELD:

4   Q.   Just to be clear, you are not

5 expressing an opinion on the validity --

6 reliability and validity of these studies with

7 respect to the categories of sports, movies,

8 series, commercial television, news, and

9 devotional programming? That was not part of

10 your analysis?

11   A.   Right. I was just asked to evaluate

12 the surveys from the perspective of Canadian

13 Claimants' perspective.

14   MR. SATTERFIELD: Thank you.

15   JUDGE BARNETT: Thank you,

16 Mr. Satterfield. Cross-examination?

17   MS. PLOVNICK: We do.

18   JUDGE BARNETT: Thank you.

19   MS. PLOVNICK: Strange when the mic is

20 here. We haven't had them for several days.

21   CROSS-EXAMINATION

22 BY MS. PLOVNICK:

23   Q.   So good morning, Dr. Conrad. I'm Lucy

24 Plovnick and I represent Program Suppliers.

25   A.   Hi, Ms. Plovnick.

1 Q. Nice to meet you.

2 A. Nice to meet you.

3 Q. So now, as you have testified, you

4 reviewed both the Bortz and the Horowitz

5 surveys in preparation for your testimony. And

6 you say in your written testimony, and you also

7 were just saying to Mr. Satterfield, that you

8 were not asked to opine on whether the Bortz or

9 Horowitz surveys provide information on the

10 relative value of programming on distant

11 signals for the other Claimant categories,

12 other than the Canadian Claimants. Is that

13 correct?

14 A. That's correct.

15 Q. So you don't have an opinion as to the

16 other categories?

17 A. I -- I'm developing -- I'm developing

18 one. I can develop one as we speak.

19   (Laughter.)

20   THE WITNESS: As I said, there is this

21 -- I do think that there are two types of

22 categories in both surveys. What correspond to

23 natural categories that are content-based, and

24 this, I believe, is how most respondents think

25 about programming, and these less natural or

1 unnatural categories, Canadian and Public

2 Television, which I think conflicts with how

3 people naturally think about their -- think

4 about programming categories.

5   So my sense is that -- but this is --

6 but I have no real evidence for this. My sense

7 is that the problems are more severe for the

8 unnatural categories. And so the categories

9 that correspond more to how people think

10 probably don't suffer from -- to the same

11 extent.

12 BY MS. PLOVNICK:

13   Q.   So you would confine your criticisms

14 to what you call these unnatural categories and

15 you really don't intend to criticize the other

16 categories that have been -- evaluations to

17 those categories?

18   A.   Yes and no. My focus is on the -- on

19 the unnatural categories, but, for example, the

20 use of examples, my criticism of the use -- the

21 way the examples are used and also the lack of

22 pre-testing is relevant to, I think, all of the

23 programming categories.

24   Q.   The use of examples or the use of

25 non-examples?

1   A.   Well, the use -- actually, the use of

2   examples because I think, as I tried to

3   indicate, examples can have unexpected

4   consequences. And my sense is that in the

5   Horowitz survey, the examples were selected

6   without this in mind, without the sort of the

7   frequency or typicality of the instances in

8   mind.

9   Q.   So I want to come back to that in just

10   a minute. But on your -- in your testimony on

11   page 9, in the second paragraph, which is

12   Exhibit 4003, you say that you cannot opine on

13   whether a constant sum survey is suited to the

14   royalty allocation task at hand in this

15   proceeding.

16   Do you see that?

17   A.   Yes.

18   Q.   And so you have not been asked to

19   opine on whether a constant sum survey could be

20   used at all to evaluate the categories?

21   A.   Right.

22   Q.   And you don't have an opinion on

23   whether that's the appropriate methodology?

24   A.   I think it's a reasonable methodology.

25   I think the particular implementation of it has

1   problems that I have tried to mention having to

2   do largely with the categories.

3   Q.   Are you aware that the Canadian

4   Claimants also commissioned a constant sum

5   survey in this proceeding done by Debra

6   Ringold?

7   A.   Yes.

8   Q.   Have you reviewed that survey?

9   A.   I have, although not to the extent

10   that I have reviewed the two that we're talking

11   about now.

12   Q.   Did you form an opinion about whether

13   that survey is suited to the task at hand?

14   A.   I think that it is, because the

15   categories are more uniform. They're all

16   content-based.

17   Q.   But -- so you do think a constant sum

18   survey can be appropriate, just not the

19   Horowitz or Bortz survey?

20   A.   Yes.

21   Q.   All right. So I want to talk with you

22   a little bit about a criticism you made of the

23   Bortz survey on pages 5 through 6 about Bortz's

24   decision to exclude Canadian and PTV-only

25   systems.

1   And -- if you're there.

2   A.   Um-hum.

3   Q.   You reference the Judges' decision in

4   the 2004/2005 proceeding and you explain their

5   criticism. Can you explain why Bortz was wrong

6   to exclude those systems?

7   A.   Can you rephrase your question?

8   Q.   Can you explain in your own words why

9   you believe they were wrong to exclude those

10   systems, PTV-only and Canadian-only?

11   A.   I -- well, first, it does reduce the

12   sample size, but I think beyond that, there is

13   a kind of non- -- sort of an inconsistent

14   practice in that a system that might have only

15   had one of -- a system that was included might

16   have had primarily one signal and was able to

17   provide value for that, but was unable to do

18   that if they only provided -- if they only

19   carried a Canadian signal.

20   Q.   So you believe Bortz should have

21   surveyed those systems?

22   A.   Yes.

23   Q.   Now, you're aware that Horowitz did

24   attempt to survey those systems, the

25   Canadian-only and PTV-only systems?

1   A.   Yes.

2   Q.   Now, did you review Dr. Frankel's

3   testimony in this proceeding?

4   A.   Yes.

5   Q.   And are you aware that he and his

6   weighted -- weighting of the Horowitz survey,

7   that he adjusted the results to allocate

8   100 percent value to Canadian-only and Public

9   Television-only systems?

10   A.   Yes. That sounds familiar to me.

11   Q.   So would you agree with that

12   allocation?

13   A.   Well, as I said, I am concerned about

14   the interpretation of the question for systems

15   that carried only one signal. The fact that

16   they might have attributed -- in most cases

17   attributed -- carried only a Canadian signal,

18   attributed less than 100 percent value to it

19   suggests to me that there is a communication

20   problem in the survey response task.

21   Q.   So should they have allocated

22   100 percent?

23   A.   Yes. That would be the logical thing.

24   Q.   And Dr. --

25   JUDGE STRICKLER: Excuse me, who's the

1   "they" in that answer, the survey respondents

2   or the people who are administering the survey?

3   THE WITNESS: The survey respondents.

4   BY MS. PLOVNICK:

5   Q.   The survey respondents should have

6   allocated 100 percent to Canadian-only and

7   PTV-only signals?

8   A.   If they only carried those signals,

9   yes.

10   Q.   If they only carried those signals?

11   A.   Given the wording of the question.

12   JUDGE STRICKLER: To the extent that

13   survey respondents for a system where there was

14   only Public Television programming or Canadian

15   programming allocated less than 100 percent, I

16   think you used the phrase there, now I don't

17   think you used this phrase, miscommunication or

18   confusion with regard to it, should that have

19   called to mind that there might have been more

20   general concerns as to the understanding of

21   respondents as to how to -- how to allocate

22   value among the categories?

23   THE WITNESS: I think so, yes.

24   JUDGE STRICKLER: Thank you.

25   BY MS. PLOVNICK:

1   Q.   So -- but those systems should have

2   received 100 percent allocation by the

3   respondent in your view?

4   A.   Yes.

5   Q.   And so if Dr. Frankel gave them

6   100 percent, then that would have been

7   consistent with what you thought those

8   respondents should have afforded PTV-only and

9   Canadian-only systems?

10   A.   Yes.

11   Q.   Okay.

12   JUDGE STRICKLER: Would it have been

13 more appropriate to do what Dr. Frankel did and

14 apply the 100 percent or would it have been

15 more appropriate to say the survey appears to

16 be invalid because there's an irrational

17 response that keeps coming up? Which would

18 have been the more appropriate way to handle it

19 in your opinion.

20   A.   The latter, to gets the question

21 wording right in the first place and not rely

22 on statistical adjustment after the fact.

23   JUDGE STRICKLER: Thank you.

24 BY MS. PLOVNICK:

25   Q.   So it's your testimony that a survey

1   like the Bortz survey that, you know, did not

2   survey these systems and then also didn't

3   afford value to them, I think you mention a

4   zero value, that that should just be thrown

5   out, that you can't salvage it with an

6   adjustment?

7   A.   I'm not sure. I'm not sure what the

8   solution is, but there's clearly a problem.

9   Q.   Okay. So, Dr. Conrad, I want to turn

10   your attention to page 13 of your testimony.

11   And this is Exhibit 4003.

12   And in footnote 18, you cite to an

13   article there. And you also talk about it in

14   the text. And I'm going to mess up how to say

15   the last name, is it Tourangeau?

16   A.   Tourangeau.

17   Q.   Tourangeau, thank you. The Tourangeau

18   article. And you're also a co-author on that

19   article, correct?

20   A.   Yes.

21   Q.   If you could look in the green binder

22   over there, at 6049. I think you probably have

23   it. If not, I can ask to approach and make

24   sure you have it. If you flip to the tab that

25   says Allocation Exhibit 6049, it's kind of

1   two-thirds of the way back.

2   JUDGE BARNETT: Is this exhibit

3   admitted?

4   MS. PLOVNICK: Not yet. I'm going to

5   ask.

6   JUDGE BARNETT: Okay.

7   BY MS. PLOVNICK:

8   Q.   So is this a copy of the article that

9   you authored and cite in your testimony?

10   A.   Yes, it appears to be.

11   MS. PLOVNICK: Your Honor, I would

12   move to admit Exhibit 6049.

13   JUDGE BARNETT: Hearing no objection,

14   6049 is admitted.

15   (Exhibit Number 6049 was marked and

16   received into evidence.)

17   BY MS. PLOVNICK:

18   Q.   So in this article you talk about the

19   use of examples in survey questionnaires; is

20   that correct?

21   A.   Yes, that's correct.

22   Q.   And you conclude -- and if you just

23   even look after in the -- at the abstract here

24   on the first page, "Examples seem to improve

25   the accuracy of the answers when they remind

1   the respondents to include items they might

2   otherwise have left out, because they had

3   either forgotten or were unsure whether to

4   include them."

5   So there are instances when examples

6   can help in survey research?

7   A.   Yes.

8   Q.   And this article was about food

9   consumption. I think you mentioned that,

10   correct? And you found that respondents, when

11   they were given examples, especially atypical

12   examples, that that was helpful.

13   A.   Yes.

14   Q. . So what's an atypical example?

15   A.   Well, from a category like vegetables,

16   radishes or rutabagas are atypical.

17   Q.   So would an example be helpful if,

18   say -- if a respondent was unfamiliar with the

19   contents of a category, would an example be

20   helpful in that context?

21   A.   What did you mean by "unfamiliar with

22   the content of the category"? I mean, if it's

23   a brand-new category that they've never heard

24   before, examples would probably help.

25   Q.   Well, say a category like non-team

1 sports. That's a kind of an unusual category.

2 Would an example be helpful in that context?

3   A.   Actually, it doesn't -- that category

4 does not seem so -- you know, so difficult to

5 interpret to me. So I'm not sure that -- you

6 know, if she said fencing or something, I'm not

7 sure that that would change my thinking about

8 that category.

9   So actually, it's hard for me to see

10 in that example -- in that instance why

11 examples would help or how examples would help.

12   Q.   Well, let's look at page 14 of your

13 testimony. You talk about the movies category

14 there, correct?

15   A.   Yes.

16   Q.   And you conclude that an example like

17 -- in an example like this in the movies

18 category, that providing -- in this particular

19 category context, that providing examples could

20 be helpful. Isn't that right? I mean, you

21 say, if you look on the second paragraph down,

22 "The examples presented within the six

23 content-based categories may well recall of

24 particular programs for consideration in

25 assigning value to the category."

1   So that was your testimony, correct?

2   A.   Yeah, they may well -- yes, I see it

3 here. They may well facilitate recall of those

4 examples, at least.

5   Q.   So --

6   A.   The question -- sorry, if I can just

7 go on.

8   Q.   Go ahead.

9   A.   The question is whether they will

10 bring to mind other instances that aren't --

11 that haven't spontaneously come to mind. But,

12 yes.

13   Q.   And you say that --

14   A.   They could -- they could help.

15   Q.   They could help. And so like in this

16 example you mention that it seems likely other

17 movies like Star Wars and Avatar would come to

18 mind after these examples were provided?

19   A.   I think these would have come to mind

20 otherwise, is my point here. It's -- so they

21 -- so it's this idea that movies are a coherent

22 category and these are typical instances. An

23 atypical instance like -- and I'm not an expert

24 in film but like documentaries, you know, a

25 documentary example, I think would have been

1   more helpful, would have brought to mind

2   instances that wouldn't have more spontaneously

3   come to mind.

4   Q.   So the more atypical the examples, the

5   better, in your view?

6   A.   Well, in this paper, super-atypical

7   ones were not helpful, but sort of moderately

8   atypical examples were.

9   Q.   What's a moderately atypical example

10   of a movie?

11   A.   Well, I have to look at the -- we have

12   a table in here. We had -- well, we had -- we

13   had examples that were called exceptions, which

14   actually were kind of at odds with the

15   definition of the category. So a moderately

16   atypical, what we called a peripheral example,

17   so I'm looking at on page 6 of 26 in the

18   article, Table 1.

19   Q.   So which one of those examples?

20   A.   So -- yeah, so for dairy, frozen

21   yogurt, ice milk, sour cream, those are

22   atypical. They're not as extremely atypical as

23   the exceptions, so in the follow-up studies,

24   the exceptions were eliminated because they

25   were too confusing to people.

1   But frozen yogurt is atypical compared

2   to cream or butter as an instance -- as an

3   example of dairy.

4   Q.   So in the survey, going back to the

5   Horowitz survey, so in your opinion if you --

6   if an example was to be added of a movie, it

7   should be an atypical example but not an

8   extremely atypical example?

9   A.   Yeah. Yeah, not an exception, not a

10   movie that's not really a movie, like sheep

11   cheese is an exception here. That's not really

12   dairy according to the definition to the right.

13   I guess my sort of high-level comment

14   about the use of examples there is that they

15   were selected without consideration for these

16   -- of these issues.

17   Q.   Of the atypical issue?

18   A.   Atypical, yeah, the typicality of the

19   instances, yes.

20   Q.   If these are programs that aired on

21   distant signals, that would not have been

22   enough of a consideration for them to be used

23   as examples; just these are examples that aired

24   on a distant signal in the year?

25   A.   That being the example?

1   Q.   I'm saying if that was the

2   criterion --

3   A.   If that was an example?

4   Q.   -- that wouldn't be a good criterion?

5   A.   I don't think -- well, it wouldn't

6   work for me personally.

7   Q.   It wouldn't work for you.

8   JUDGE STRICKLER: I have a question if

9   I may, counsel.

10   MS. PLOVNICK: Go ahead.

11   JUDGE STRICKLER: On page 14 of your

12   testimony at the very first paragraph,

13   continuation from the previous page, you write

14   in part of the sentence, "I concur with

15   Trautman's intuition."

16   Let me know when you get there. It's

17   page -- very top of page 14, sir.

18   THE WITNESS: Yep, there.

19   JUDGE STRICKLER: Do you see that?

20   THE WITNESS: Yes.

21   JUDGE STRICKLER: So you can orient --

22   you can go back to page 13. My question to you

23   is are you saying that you agree with -- you

24   concur with Trautman's intuition specifically

25   as it relates to those movie examples that are

1   cited further down on page 14 or are you saying

2   that you concur with his intuition generally

3   about the use of examples being inappropriate

4   in certain instances when it excludes

5   programming types that are not included within

6   the examples?

7   So my question is are you agreeing

8   with him generally, as to his intuition, or

9   specifically as he applies that intuition to

10   the use of examples in movies?

11   THE WITNESS: I think in general is a

12   more -- I think his general point is right,

13   that the -- well, my interpretation of it is

14   that the use of examples is not straightforward

15   and needs evaluation through pre-testing.

16   JUDGE STRICKLER: So you were not

17   offering an opinion as to whether or not the

18   use of the particular examples of movies was or

19   was not correct in -- he was not correct to use

20   those examples in his survey; you're just

21   talking about his general intuition?

22   THE WITNESS: I think I need to reread

23   this.

24   JUDGE STRICKLER: Yeah, take your

25   time, please.

1   THE WITNESS: Well, so the issue, I

2   believe, that he was raising is whether

3   examples -- and I'm not sure which of you I

4   should address -- I'll address you, Judge.

5   I believe the issue Trautman was

6   raising is that the use of examples runs the

7   risk of constraining people's thinking to just

8   the examples and not necessarily helping them

9   understand the extent of the category and all

10   of the different members it might have.

11   JUDGE STRICKLER: That general point

12   is what you were agreeing to?

13   THE WITNESS: Yes.

14   JUDGE STRICKLER: Were you saying the

15   listing of movies here was an example of that

16   constraining effect of examples or -- or were

17   you not saying that?

18   THE WITNESS: I wasn't saying that. I

19   mean, I think these -- there's a long list of

20   movies here. And even if a respondent was

21   restricted to these, it would be not

22   exhaustive, of course, but I think it's long

23   enough that it would have effectively explained

24   to them the scope of the category and they

25   would have been able to bring other examples to

1   mind.

2   JUDGE STRICKLER: Thank you.

3   BY MS. PLOVNICK:

4   Q.   So later down on page 14, you

5   criticize the examples that Horowitz used for

6   the Canadian category.   And you -- the examples

7   that you are mentioning here are Steven &

8   Chris, The Social, Coronation Street, Busytown

9   Mysteries, and CBC News.   That's correct?

10   A.   Yes.

11   Q.   If you flip over to page 15, you say,

12   "The only feature these programs share is that

13   they are broadcast on Canadian television."   Is

14   that correct?

15   A.   That's what I said here, yes.

16   Q.   That's what you said.   So is it the

17   category, all programs that were broadcast on

18   Canadian television, that these are examples of

19   or purported to be examples of?

20   A.   They're purported to be examples of

21   that category, yes.

22   Q.   And they all have that in common, that

23   they are all broadcast on Canadian television?

24   A.   Yes.   I mean, I have to take the

25   word --

1   Q.   Right. So if -- if -- what would you

2   add to these examples to make it better in your

3   view?

4   A.   I don't think examples are going to do

5   it. This is that unnatural category. And so

6   examples will not bring a coherent category to

7   mind.

8   Q.   So in your view, it would -- would it

9   have been better to not have examples for the

10   unnatural categories and just say all programs

11   broadcast on Canadian stations? Would that

12   have solved -- would that have been preferable

13   to providing some examples?

14   A.   You know, I don't know. I would have

15   done some up-front evaluations and collected to

16   data to see what the impact was.

17   Q.   You don't know whether it was helpful

18   or not helpful?

19   A.   No, I don't know that it was helpful

20   or harmful, right, or neutral. I don't know.

21   I mean, I think I said that it could exacerbate

22   the problem, if I can find that.

23   Q.   Or it could -- it could help the

24   problem -- it could help to remedy the problem?

25   You don't know which one it did?

1   A.   Yeah, I -- it's hard to say. I think

2 examples are more likely to help movies or

3 sports than they are -- than they are Canadian

4 broadcasting.

5   JUDGE STRICKLER: Excuse me,

6 Dr. Conrad. You used the phrase and you

7 indicated the literature uses the phrase

8 "unnatural categories" and I understand what

9 you're saying.

10   It sounds to me like the

11 categorization is responding to two -- is

12 categorizing two different ways. When you ask

13 about Canadian broadcasting, Canadian

14 programming, you're asking a who question, who

15 broadcast this, whereas you're asking Program

16 Suppliers or team sports, you're asking what

17 were you watching, not who was providing it to

18 you.

19   Is that the fundamental cleave that

20 you're referring to?

21   THE WITNESS: Yeah, that's a very good

22 way to describe it.

23   JUDGE STRICKLER: Thank you.

24 BY MS. PLOVNICK:

25   Q.   So we were talking about these program

1   categories, in particular, about unnatural

2   categories. The respondents to this survey are

3   cable system operator executives. Is that

4   correct?

5   A.   That's my understanding.

6   Q.   And do you believe that they -- the

7   respondents would be industry experts?

8   A.   Yeah, I believe they would be industry

9   experts.

10   Q.   So do you believe that these industry

11   experts would have the knowledge to understand

12   what the unnatural categories were?

13   A.   Not necessarily. I mean, if they are

14   consulting -- if they're answering on the basis

15   of their thought processes without consulting

16   program listings or other records, I think

17   they're just as prone to under-estimate the

18   frequency of unnatural categories as are

19   non-respondents -- you know, people -- ordinary

20   people.

21   Q.   But if they should look at program

22   listings, then having some examples might help

23   them to understand the category?

24   A.   I don't think so. I mean, as I said,

25   these -- these examples don't -- they don't

1   bring to mind a particular category.

2   Q.   Even though they're all Canadian

3   programs?

4   A.   Well, I don't think they're all -- I

5   believe the examples don't all originate.   I

6   believe at least one of them is a British show.

7   Q.   Do you understand the definition of

8   the Canadian category to include non-U.S.

9   programs broadcast on Canadian signals?

10   A.   That sounds like -- that sounds right

11   to me.

12   Q.   So -- but you haven't looked to see

13   whether or not these program examples would

14   fall in the Canadian Claimants group category?

15   A.   Oh, well they might meet the technical

16   definition, but whether they will bring to mind

17   other -- other instances of that category is

18   unlikely.

19   Q.   So -- but -- so I'm just trying to

20   understand because you made a comment that it

21   would help to look at a programming list.   Do

22   you think that -- so you think it would be

23   helpful to review examples of programs that

24   fall in the category, just not these examples?

25   A.   Not examples.   It's if you look at an

1   exhaustive -- if the respondents were shown an

2   exhaustive list of programming, I think they

3   would have understood what they're being asked

4   to evaluate, but that's not really practical in

5   a telephone survey.

6   Q.   So you're -- so now this is another

7   point I wanted to ask you about. So that would

8   probably not have been appropriate in a

9   telephone survey. That would have required a

10   different format for the survey than was

11   utilized here?

12   A.   Yeah, if it would even have been

13   feasible because it increases the demand on the

14   respondent, the burden, significantly to

15   require them to review exhaustive program

16   listings.

17   Q.   So the sort of exercise that you're

18   talking about may not have been feasible for

19   cable system industry executives?

20   A.   Correct.

21   Q.   Would there have been any way for a

22   cable operator in a telephone survey to know

23   what programming aired on Canadian signals, if

24   they weren't given examples?

25   A.   I'm sorry, respondent or interviewer?

1   Q.   A respondent.

2   A.   A respondent. Well, if their system

3 carries the signal, it's conceivable they would

4 know what program -- what programs they --

5   Q.   It's conceivable, but they may or may

6 not know?

7   A.   Right. I would assume, yeah. I can't

8 -- I can't -- I didn't interview any of the

9 respondents, so I don't know, but it's

10 conceivable they would -- it's conceivable they

11 don't know all the programming that's

12 presented. That was your question, right?

13   Q.   That was, right.

14   All right. I have no further

15 questions.

16   JUDGE BARNETT: Other

17 cross-examination? Not everyone at once. No

18 other questions for this witness?

19   MR. ADKINS: I have some brief

20 questions, Your Honor.

21   CROSS-EXAMINATION

22 BY MR. ADKINS:

23   Q.   Good morning, Dr. Conrad.

24   A.   Good morning.

25   Q.   My name is Bryan Adkins and I

1   represent the Joint Sports Claimants.

2   A.   Good morning, Mr. Adkins.

3   Q.   So I'd like to ask you about the

4   Horowitz survey's use of programming examples.

5   And have you reviewed the written testimony of

6   Dr. Mathiowetz where she criticizes the

7   Horowitz survey for providing incorrect or

8   misleading examples to the respondents?

9   A.   I have reviewed it, yes.

10   Q.   And have you reviewed Mr. Trautman's

11   rebuttal testimony where he describes specific

12   examples used in the Horowitz survey that he

13   determined were incorrect or misleading?

14   A.   I believe I have reviewed that. As I

15   say, I'm not 100 percent sure.

16   Q.   Sure. And so just as a general

17   matter, you would agree that using examples in

18   survey questions can sometimes be harmful?

19   A.   Yes.

20   Q.   So if a survey question is going to

21   use examples, it's important to be careful in

22   selecting those examples?

23   A.   Yes.

24   Q.   And would you agree that an incorrect

25   example does not help clarify a survey

1   question?

2   A.   It depends on what you mean by an

3   incorrect example. Do you mean an example that

4   violates the definition of the category?

5   Q.   Right, an example that -- something

6   that purports to be an example -- I think you

7   used, for example, sheep cheese.

8   A.   Right.

9   Q.   It's not really a dairy.

10   A.   Yes.

11   Q.   That's an incorrect example?

12   A.   Yeah. And that does -- in that study,

13   lowers the frequency of consumption that's

14   reported of dairy, of the category.

15   Q.   And do survey respondents generally

16   assume that survey researchers are being

17   truthful with them?

18   A.   Can you repeat the question?

19   Q.   Sure. Do respondents to surveys -- do

20   they generally assume that survey researchers

21   or survey interviewers are being truthful with

22   them?

23   A.   I mean, I think so. I think there's

24   plenty of skepticism in the world --

25   Q.   Sure.

1   A.   -- especially about political polling,

2   but I think in general they assume that they

3   are being asked these questions for a

4   legitimate reason, even if the questions seem

5   -- even if the questions seem unusual to them.

6   Q.   And survey respondents, do they

7   generally assume that the information provided

8   to them in a survey is correct and not

9   misleading?

10   A.   I would assume so.

11   Q.   And providing respondents with

12   incorrect or misleading examples, that can bias

13   a survey, right?

14   A.   Yes. I mean, that's what this study

15   shows, I think.

16   Q.   Thanks.

17   So changing gears now, I'd like to

18   just briefly discuss your testimony that the

19   Bortz and Horowitz surveys capped the maximum

20   overall value for Canadian programming.

21   So looking at page 4 of your written

22   rebuttal testimony. So you list here the

23   number of -- sorry. Are you there?

24   A.   I'm there, I'm there.

25   Q.   You list here the number of Form 3

1   systems that carried a Canadian signal on a

2   distant basis in each year, 2010 to 2013?

3   A.   Yes.

4   Q.   And looking at this, in 2010 there

5   were only 40 Form 3 systems that carried a

6   Canadian signal on a distant basis; is that

7   right?

8   A.   Yes, that's what it says.

9   Q.   And 42 in 2011?

10   A.   Yes.

11   Q.   And 27 in 2012?

12   A.   Yes.

13   Q.   And only 32 in 2013?

14   A.   Correct.

15   Q.   And then looking at the percentages

16   here on page 4, so these systems that carried a

17   Canadian signal on a distant basis, these

18   represented only around 3 to 4 percent of the

19   systems?

20   A.   Yes.

21   Q.   And as I understand it, your concern

22   is that because approximately 96 or 97 percent

23   of the total systems don't carry any Canadian

24   stations on a distant basis, that caps the

25   Canadian Claimants' maximum value possible in

1   the surveys?

2   A.   Yes, in particular if the 96 percent

3   are -- if the analysis attributes zero value to

4   Canadian signal for the 96 percent. I mean,

5   they couldn't possibly give it a non-zero

6   value. Even had they been asked, they might

7   have.

8   Q.   All right. So in your view then, the

9   Canadian Claimants are entitled to share in the

10   royalties paid by those 96 to 97 percent?

11   A.   You know, I can't -- I can't weigh in

12   on that. That's -- I have no expertise in that

13   area.

14   Q.   Okay. Thank you, Dr. Conrad. I have

15   no further questions at this time.

16   A.   Okay.

17   JUDGE BARNETT: Any further

18   cross-examination? All right.

19   JUDGE STRICKLER: I have one question.

20   JUDGE BARNETT: Sure.

21   JUDGE STRICKLER: Dr. Conrad, can I

22   turn your attention, please, to the bottom of

23   page 15 of your testimony, sir. Let me know

24   when you're there.

25   THE WITNESS: Okay. I'm there.

1   JUDGE STRICKLER: In that paragraph

2   that begins with the words "a final note," and

3   then continues on to the top of page 16, you

4   have a critique of telephone interviews and

5   make a comparison with, for example, web

6   surveys.

7   Is this a criticism you're levying

8   specifically at the telephone interviews that

9   were done by the survey experts in this

10   proceeding?

11   THE WITNESS: No, this is a general --

12   it's less of a criticism than a characteristic

13   of telephone interviews in general or

14   interviews in general. It can be face-to-face.

15   There's just -- there's time pressure

16   to respond quickly. And so a response task

17   that could benefit from more thoughtful, slow

18   deliberation is likely to suffer.

19   So web surveys are self-administered,

20   is the phrase. A mail -- paper questionnaire

21   is self-administered. Those give people more

22   time to consider the questions they're being

23   asked. There's no pressure to respond within a

24   second.

25   JUDGE STRICKLER: I understand. Is it

1   your opinion that the use of telephone surveys

2   in this particular proceeding was

3   inappropriate, given that criticism?

4   THE WITNESS: You know, inappropriate

5   is, I think, a strong term to use for a method

6   that has been so widely used for so many years,

7   but I do think that for this task, which may

8   require careful consideration by the

9   respondents, the time pressure of a telephone

10   survey pushes them to answer more quickly than

11   would be optimal.

12   JUDGE STRICKLER: So is it your

13   opinion that the survey respondents were pushed

14   to answer more quickly than they otherwise

15   would have, had they given appropriate levels

16   of thought to it?

17   THE WITNESS: It seems possible and

18   likely in -- in some cases. What would have

19   been --

20   JUDGE STRICKLER: I'm interrupting you

21   on purpose and I apologize.

22   THE WITNESS: Yeah.

23   JUDGE STRICKLER: When you say it's

24   possible or likely in some cases --

25   THE WITNESS: Yeah.

1   JUDGE STRICKLER: -- which is not

2   necessarily an opinion one way or the other as

3   to applying your general comment to this

4   particular case, can you apply your general

5   criticism to these particular telephone

6   surveys?

7   THE WITNESS: I think it's likely.

8   JUDGE STRICKLER: In this particular

9   case?

10   THE WITNESS: In this particular case.

11   I'm not suggesting that it would have biased

12   the estimates for any one of the programming

13   categories, but introduces a certain amount of

14   noise, a certain amount of inaccuracy in the

15   responses.

16   JUDGE STRICKLER: Thank you.

17   JUDGE BARNETT: Mr. Satterfield,

18   redirect?

19   MR. SATTERFIELD: No redirect.

20   JUDGE BARNETT: Okay. Thank you,

21   Professor Conrad. You may be excused.

22   THE WITNESS: Thank you.

23   (The witness stood down from the

24   stand.)

25   JUDGE BARNETT: Mr. Satterfield, are

1   you calling the next witness as well?

2   MR. SATTERFIELD: Well, Mr. Cosentino

3   is calling the next witness.

4   MR. COSENTINO: Our next witness is

5   Dr. Lisa George. Can I go get her?

6   JUDGE BARNETT: Yes. Dr. George,

7   before you sit --

8   Whereupon--

9   LISA GEORGE,

10   having been first duly sworn, was examined and

11   testified as follows:

12   JUDGE BARNETT: Please be seated.

13   MR. COSENTINO: Your Honor, two things

14   before I begin. One is I'd like to give the

15   witness and Judge Strickler a copy of this, and

16   also I need to turn on the technology.

17   JUDGE BARNETT: Oh, certainly.

18   JUDGE FEDER: Dr. George, is your

19   screen on?

20   THE WITNESS: My screen is on.

21   DIRECT EXAMINATION

22   BY MR. COSENTINO:

23   Q.   Good morning.

24   A.   Good morning.

25   Q.   Could you please state your name and

1   spell it for the record?

2   A.   My name is Lisa George, L-i-s-a,

3   G-e-o-r-g-e.

4   Q.   Right.   And on whose behalf are you

5   appearing today?

6   A.   I'm appearing on behalf of the

7   Canadian Claimants group.

8   Q.   Could you please provide a summary of

9   your education?

10   A.   So I have a Bachelor's and Master's

11   degree in engineering from Cornell University,

12   and I have a Ph.D. in applied economics from

13   the Wharton School at the University of

14   Pennsylvania.

15   Q.   And where do you work currently?

16   A.   I'm a professor at Hunter College,

17   also on the faculty of the graduate center at

18   the -- part of the City University of New York.

19   Q.   And what do you --

20   A.   And we've lost our monitor.

21   Q.   Right.   I know.

22   A.   Okay.

23   Q.   And what do you do at Hunter?

24   A.   So I -- like most professors, I have a

25   research role and a teaching role, so I conduct

1   research on media markets, economic research,

2   empirical research. I also teach economics

3   courses in microeconomics, industrial

4   organization, a course on economics of the

5   media.

6   And until recently, I was the editor

7   in chief of an economics journal, Information

8   Economics and Policy.

9   Q.   What type of journal -- what type of

10   articles did that journal publish?

11   A.   It covered peer-reviewed economic

12   articles, economic research on

13   telecommunications markets, media markets, and

14   some intellectual property, and digital markets

15   in general.

16   Q.   All right. Now, prior to Hunter,

17   where did you work?

18   A.   So after completing my undergraduate

19   work, I was commissioned as an officer in the

20   U.S. Navy. So I worked in Washington at the

21   Pentagon for five years.

22   And after completing my Ph.D., I was

23   an economics professor at Michigan State

24   University before leaving to go to Hunter.

25   Q.   All right. Now, professor George, you

1   have in front of you a binder. Could you

2   please turn to the document marked Exhibit 405,

3   which has previously been admitted.

4   Do you know what that document is?

5   A.   This is my written corrected direct

6   statement from May 17, 2017.

7   JUDGE BARNETT: I'm sorry,

8   Mr. Cosentino. That number again?

9   MR. COSENTINO: 4005, Your Honor.

10   JUDGE BARNETT: Thank you. I only

11   heard one zero, so I want to make sure.

12   BY MR. COSENTINO:

13   Q.   And did you prepare this document?

14   A.   I did.

15   Q.   Okay. Do you have any corrections to

16   this document?

17   A.   I have one correction. On page 57,

18   there -- this is the specification of my

19   empirical model, and at the bottom of the page

20   where we see b19, that indicator variable

21   should be 2012_2. It's a duplication there.

22   Q.   All right. Thank you.

23   With that correction in mind, do you

24   affirm that this is -- under oath that this is

25   true and correct?

1   A.   I do.

2   Q.   All right. And this document includes

3   your CV as Appendix A?

4   A.   It does.

5   Q.   All right. Does that provide

6   additional details on your education and

7   experience?

8   A.   It does, yes.

9   Q.   Now, Dr. George, you also have in that

10   binder Exhibit 4006, which has previously been

11   admitted. Can you take a look at that and tell

12   us what it is?

13   A.   That's the corrected amendment to my

14   written direct statement dated May 17th, 2017.

15   Q.   And did you prepare that exhibit?

16   A.   I did.

17   Q.   And do you have any corrections to

18   that exhibit?

19   A.   No, I do not.

20   Q.   And is it true and correct?

21   A.   It is true and correct.

22   Q.   And, finally, Professor George, you

23   have a document there called Exhibit 4007,

24   which has previously been admitted. Can you

25   please tell us what that is?

1   A.   This is my written direct testimony

2 dated September 11th, 2017. It's my rebuttal

3 testimony.

4   Q.   All right. And do you have any

5 corrections to this exhibit?

6   A.   I do. I have a correction to a

7 footnote in Table 2, well, the note to Table 2,

8 which is on page 18, and on the note to the

9 table, the accounting periods 2010 to 2012 in

10 the JSC sample.

11   Q.   Okay. So it should say 2010 to 2012?

12   A.   Correct, not 2013.

13   Q.   And with that correction in mind, do

14 you affirm under oath that this is true and

15 correct?

16   A.   I do.

17   Q.   All right.

18   MR. COSENTINO: At this time, Your

19 Honor, I would offer Dr. George as an expert in

20 the field of economics with experience in media

21 markets and industrial organizations.

22   JUDGE BARNETT: Hearing no objection,

23 Dr. George is so qualified.

24 BY MR. COSENTINO:

25   Q.   All right. Professor George, would

1   you explain your understanding of the purpose

2   of this proceeding?

3   A.   The purpose of this proceeding, as I

4   understand it, is to allocate royalties paid

5   under the compulsory license to the claimant

6   categories.

7   Q.   All right. And what is your

8   understanding of the criteria under which

9   royalties should be distributed?

10   A.   My understanding is that royalties

11   should be distributed according to the relative

12   marketplace value of the programming.

13   Q.   All right. Now, Professor George, you

14   have three pieces of testimony in front of you,

15   and cover a lot of ground in those things. So

16   you have prepared some slides; is that correct?

17   A.   I did.

18   Q.   To help assist the proceedings?

19   A.   I did, yes.

20   Q.   Thank you. So what I want to do is

21   show the first slide in this. All right.

22   Can you please give us an overview of

23   your testimony today?

24   A.   So what I would like to do today is

25   first talk about how I use regression to

1   estimate the relative market value of Canadian

2   Claimant programming.

3   So I'll discuss it as an overview

4   first, and then I will talk about the key

5   aspects of the Canadian Claimant model relative

6   to approaches in the past.

7   I will go through some of the

8   high-level general criticisms of regression

9   that have been raised by various claimants and

10   explain why those are incorrect. I then will

11   proceed to some of the specific criticisms

12   offered by Dr. Gray and Dr. Erdem, explain why

13   those are not valid.

14   Then I'll move into the other

15   regression analyses, and I'll talk about why

16   Dr. Israel's estimated shares for Canadian

17   Claimant programming are not correct. And also

18   I'll respond to his criticism of my results.

19   And then, finally, I'll conclude with a

20   discussion of why -- how I think about

21   Dr. Crawford's analysis, why I think that it's

22   a strong and good report.

23   Q.   All right. So, Dr. George, let's

24   start at the beginning with how the CCG uses

25   regression. And I know you have a slide on

1   this one.

2   So could you explain your approach to

3   CCG valuation?

4   A.   So stepping back to the beginning, I

5   approached this problem as I approach most

6   research questions, which is to think about the

7   question, what's the data that is available to

8   address the question, how experts have tackled

9   the problem in the past, and then also how the

10   institutional environment has changed since

11   prior proceedings.

12   And after taking these things into

13   account and considering the different options,

14   I decided that a regression analysis was the

15   best approach for estimating the relative

16   market value of Canadian Claimant programming.

17   MR. MacLEAN: Objection. Your Honor,

18   this is becoming a narrative.

19   JUDGE BARNETT: Sustained. Ask more

20   questions, Mr. Cosentino.

21   MR. COSENTINO: Okay. All right,

22   thank you.

23   BY MR. COSENTINO:

24   Q.   Professor George, you have previously

25   read the studies provided by Drs. Israel and

1   Dr. Crawford?

2   A.   I have.

3   Q.   Okay. Are you -- and you're familiar

4   with their written testimony?

5   A.   I am familiar.

6   Q.   Okay. Is your analysis based on a

7   similar concept?

8   A.   It is.

9   Q.   Okay. Can you explain what that

10   concept is?

11   A.   So the regression analyses provided by

12   Dr. Israel, Dr. Crawford, and myself, we share

13   an aspect that we infer value from the carriage

14   choices of cable systems, the signals that they

15   choose to carry and the signals that they don't

16   carry, and then the associated royalty payments

17   made for those signals. And it's that

18   inference basis that's the same.

19   Q.   I have to ask more questions.

20   A.   Okay.

21   Q.   So can you explain what the goal then

22   is; I mean, what do the regressions try to

23   achieve?

24   A.   So what we want from a regression

25   analysis is we want to understand the marginal

1   willingness to pay for additional programming,

2   demand. You want to estimate demand.

3   Q.   Okay. And how do we estimate demand

4   out of cable operator decisions?

5   A.   So we observe a system carry a signal

6   in a subscriber group, maybe, you know,

7   covering a third or a tenth of the market or a

8   half, and we can see when a system -- a signal

9   is carried or not carried, there's an

10   associated royalty payment.

11   And when we see a signal carried, we

12   can infer that there's some value to the

13   system. When we see a signal not carried, we

14   can sometimes, most of the time, infer that

15   there's not value to the system for that.

16   And so regression just systematizes

17   this information in a way that gives us an

18   average willingness to pay for programming.

19   Q.   All right. Thank you.

20   Now, Professor Crawford and

21   Dr. Israel's regressions at the end provide

22   relative market valuations for the programming

23   for each claimant group in this proceeding.

24   Does yours do that?

25   A.   Mine does not.

1   Q.   Okay. Can you explain what the

2   differences are between your approach and their

3   approach?

4   A.   So in my regression analysis, I

5   estimate the relative market value of Canadian

6   Claimant programming relative to the other

7   categories combined.

8   Q.   All right. I think -- so I think when

9   you say "relative," in the end you end up with

10 one number for CCG and anything --

11   A.   Correct, I end up with one number for

12 CCG.

13   Q.   All right. And why did you make this

14 choice?

15   A.   So I made this choice in part because

16 of the limited data available to me. I did not

17 have the detailed breakdown of programming on

18 U.S. distant signals.

19   Q.   Was it necessary to have a breakdown

20 of all that information to do your analysis?

21   A.   No. It wasn't necessary to estimate

22 the relative market value of Canadian Claimant

23 programming. I didn't need to have the U.S.

24 breakdown.

25   Q.   Okay. So did your regression focus on

1   the Canadian region?

2   A.   I did. So one of the factors that's

3   different between my analysis and other

4   regressions in this proceeding is that I

5   estimated my model in the Canadian region. And

6   we'll talk about this a little bit more later,

7   but this is important because the

8   retransmission zone changes the choice set of

9   signals available to systems. Outside of the

10   retransmission zone, systems are prohibited

11   from carrying Canadian signals.

12   And so that needs to be taken into

13   account in the modeling.

14   Q.   All right. Let's take a look at your

15   model, okay? And I want to direct you to your

16   Exhibit 4005, page 57, which I think I can put

17   up here. Can you explain what this is?

18   A.   So this is a description of the

19   regression model that I estimate. And it has

20   several important components. So the first

21   piece to look at is the dependent variable here

22   is the royalty fee paid by a cable system in a

23   particular accounting period. So that's the

24   total royalty payment.

25   Then the independent variables that we

1   want to think about fall into two categories.

2   The programming categories are the important

3   ones for estimating relative market value. And

4   in my analysis, I have a measure of the minutes

5   of Canadian Claimant programming on Canadian

6   distant signals, of Joint Sports Claimant

7   programming on Canadian distant signals,

8   Program Supplier and also SDC programming on

9   Canadian distant signals together, and then all

10   minutes of programming on U.S. distant signals.

11   So that category, those are the

12   coefficients that we care about and we want to

13   interpret in the regression. The others are

14   control variables. And the control variables

15   are there to give us an all-else-equal

16   framework for estimating the variables that we

17   care about.

18   Q.   Okay. Now, those variables that we

19   care about, those are the regression

20   coefficients that we have talked about for

21   programming minutes in the context --

22   A.   Yes.

23   Q.   -- for example, of Dr. Crawford's, he

24   has one for each of the programming categories?

25   A.   Correct. We -- we estimate all of the

1   coefficients, but the ones we'll use to go and

2   calculate the shares will come from those

3   programming minute coefficients.

4   Q.   Okay. Now, the regression-only gives

5   you part of the information that you need for

6   your analysis; is that correct?

7   A.   Correct.

8   Q.   All right. And what part does the

9   regression give us?

10   A.   So regression coefficients are

11   interpreted as a willingness to pay per minute

12   or an implicit price, not a market price but an

13   implicit price also on the demand curve.

14   We take that value per minute and we

15   have to multiply it by the number of

16   compensable minutes in each category to get a

17   value contribution. And it's from those value

18   contributions, the product of the regression

19   coefficient and the quantity of minutes, that

20   gives us something we can calculate shares

21   from.

22   Q.   All right. Where did you get your

23   compensable minutes from?

24   A.   So on Canadian -- in my work, the

25   programming on Canadian distant signals is

1   compensable, but in the U.S. I have learned

2   from past reports that only a portion of

3   programming is compensable.

4   So in my analysis, my initial

5   analysis, I used the compensable minutes share

6   that was reported in Dr. Waldfogel's regression

7   analysis in 2004 and 2005.

8   Q.   Okay. And then subsequently you

9   amended that, correct?

10   A.   I did.

11   Q.   Okay. Can you explain what you did

12   then?

13   A.   So after we received testimony from

14   the other parties, I looked and noticed in

15   this -- the CTV direct statement that the

16   compensable minutes had changed over time. So

17   I updated the compensable minutes shares using

18   Professor Crawford's current direct statement.

19   Q.   Okay. And that -- those amended

20   numbers appear in your Exhibit 4006; is that

21   correct?

22   A.   Yes, in 4006.

23   Q.   Okay. So can you direct us to one of

24   the tables in that exhibit to help us

25   understand how this works?

1   A.   So we should look at Table 3.

2   Maybe -- do we have that to put up? So this is

3   a pattern that we'll see that's done in the

4   different regression analysis submitted in

5   these proceedings.

6   The first column A is reporting those

7   programming minute categories. And column B

8   is --

9   Q.   Let me stop you there a second. So in

10   your regression, these are the four categories

11   of programming minutes that you used, correct?

12   A.   This is correct. Canadian Claimant

13   minutes on Canadian distant signals, Joint

14   Sports minutes on the Canadian distant signals,

15   Program Suppliers minutes and some SDC on

16   Canadian distant signals, and then all U.S.

17   minutes.

18   And B are the regression coefficients

19   estimated for each of these categories.

20   JUDGE FEDER: Excuse me. What does

21   the 1000 in parenthesis denote?

22   THE WITNESS: So to make this a little

23   easier to read, I estimated the model in

24   thousands of minutes. So that we didn't have

25   to look at too many decimals. So these are the

1   regression coefficients in B interpreted as

2   dollars per thousand minutes. Then --

3   BY MR. COSENTINO:

4   Q.   All right. And then C?

5   A.   Then column C are the compensable

6   minutes that are calculated for the Canadian

7   signals directly but from -- I use information

8   from the CTV testimony to calculate compensable

9   minutes for U.S. distant signals. But I

10 multiply that quantity of minutes times the

11 value per minute, so column B times column C,

12 and I get a value contribution from which I can

13 estimate shares.

14   Now, an important aspect of the top of

15 this table is I am first estimating my model in

16 the Canadian region, in Canadian -- in the

17 retransmission zone. And so the shares on the

18 right-hand column in E are shares in the

19 Canadian zone.

20   Q.   Okay. So if we look at the number for

21 Canadian Claimant minutes, it's 25.4 percent.

22 That is 25.4 percent of a royalty pool for the

23 Canadian region?

24   A.   For the Canadian region. And I made a

25 calculation of royalties paid by systems in

1   that region, and it's very close to 28 percent.

2   So to come up with or calculate my final

3   estimate, I multiply that 25.4 percent by

4   20.01 percent, which we can see this

5   calculation in the bottom half of the table,

6   and in the second to last row, I have that

7   final number of my estimate, which is

8   7.11 percent for Canadian Claimants' share.

9   Q.   Okay. And that is your estimate for

10   relative market value for Canadian Claimant

11   share averaged over four years, correct?

12   A.   Over four years for the entire U.S.

13   market.

14   Q.   Now, you have also done that breakdown

15   on a year-by-year basis for 2010 to 2013?

16   A.   Yes, in amended Table 4.

17   Q.   All right. I've put that up. And so

18   does the top of this table pretty much follow

19   the same pattern we saw in the prior one?

20   A.   It does. It does. But we're

21   reporting in the -- in those yearly columns the

22   compensable minutes for all four years

23   separately. And then on the right-hand side,

24   we can calculate those value contributions for

25   each four-year separately. And then in the

1   bottom, the shares for each year separately.

2   Q.   Okay. I have a couple of questions

3   about this table. At the top, you talk about

4   Form 3 cable systems with positive DSE in the

5   Canadian region. Can you explain that?

6   A.   So recall that we are inferring value

7   from the choices -- the carriage choices and

8   non-carriage choices of cable systems. So to

9   estimate the regression, we want to focus on

10   systems where there's meaning in those choices,

11   where they bear some costs.

12   So we use -- we include or I include

13   Form 3 systems, this is actually what also

14   Dr. Israel and Professor Crawford do, and we

15   include systems that carry some distant

16   signals, so they have a DSE greater than zero.

17   That's the regression sample.

18   Q.   Okay. Another question about this.

19   If we look at the Program Supplier and SDC

20   minutes, there is a negative $293.77 as the

21   value per 1,000 minutes.

22   Can you explain your treatment of the

23   negative number?

24   A.   Yes. So this -- this comes up in the

25   rebuttals as well. So it's good to talk about

1   it. It's good to talk about it now.

2   So I am estimating the willingness to

3   pay or the value of the Program Supplier

4   content on Canadian distant signals. This is

5   completely separate from the value of that

6   programming on U.S. distant signals. And the

7   negative coefficient here is telling us that

8   this is effectively dragging down the value of

9   the Canadian signals.

10   And so then if we could replace the

11   Program Supplier content on Canadian signals in

12   a sort of hypothetical world, those -- if we

13   replaced it with Joint Sports or Canadian

14   Claimant programming, the value of the signal

15   would be higher.

16   And so this coefficient, the negative

17   coefficient, isn't really surprising to me in

18   this context because we know from a lot of

19   history of research on cable systems that it's

20   differentiated content, the sort of special

21   content that attracts readers and retains --

22   attracts subscribers and, you know, leads to

23   higher prices. This is the content that the

24   cable systems value.

25   So it's not surprising to me that more

1   Program Supplier minutes on a Canadian signal

2   reduces the value of the signal. So --

3   Q.   Okay.

4   A.   I just -- I interpret it and I factor

5   it into my analysis as -- as estimated.

6   Q.   All right. And then so the results of

7   your analysis, can you tell us what your final

8   valuation numbers are for the relative market

9   value of Canadian Claimant programming based on

10   your analysis?

11   A.   So my final estimates for the Canadian

12   Claimants' share are in the second to last row

13   of this table. So 6.55 for 2010, 6.61 for

14   2011, 7.47 for 2012, and 7.85 for 2013.

15   Q.   All right. Thank you.

16   Now I would like to go back to your

17   outline and address the second bullet point,

18   which is about the general criticisms. And I

19   believe you have a slide on this as well.

20   A.   I do, I do.

21   Q.   All right. So you have read the

22   testimony of Dr. Sanders and Dr. Erdem?

23   A.   Yes.

24   Q.   And Dr. Gray?

25   A.   And Dr. Gray, yes.

1   Q.   All right. Let's start with just an

2   overview of why you believe their criticisms

3   are wrong.

4   A.   So the criticisms of Dr. Erdem and --

5   MR. MacLEAN: Objection. My objection

6   is leading because the answers to the questions

7   are right here on the screen.

8   JUDGE BARNETT: Sustained.

9   BY MR. COSENTINO:

10   Q.   Dr. -- Professor George, you did

11 prepare these slides, right?

12   A.   I did, yes.

13   Q.   Okay.

14   A.   I did. I don't have to have them.

15 They're helpful to me but --

16   Q.   Okay. Let's -- I'll just take them

17 off. Let's start by talking about the

18 criticisms. We'll start with your criticisms

19 -- actually, I'm going to ask you about -- as a

20 starting point, let's talk about why

21 regressions are grounded in economic theory.

22   Can you explain that?

23   A.   So we're starting on this point to

24 talk about the high-level criticisms of

25 regression from Dr. Erdem, also Dr. Gray. And

1   in responding to those, the -- the thing that I

2   think is most important to keep in mind is that

3   we are estimating economic models in an

4   economic framework.

5   And the coefficients that we specify

6   in these models have an economic

7   interpretation. And so some of the changes

8   proposed by Dr. Erdem, so, for example, to

9   stick distant subscribers into the regression,

10   this changes the economic interpretation of the

11   coefficients, the ones that we're interested in

12   for estimating shares.

13   And so we have to, first and foremost,

14   kind of understand what our model and our

15   interpretation are. So changes in general that

16   toss in new variables, if they change the

17   interpretation of our programming minute

18   coefficients, we can't use them to calculate

19   shares.

20   And so some of the changes from

21   Dr. Erdem fall into that category.

22   Q.   All right. I believe Dr. Erdem also

23   does some transformations; is that true or is

24   it --

25   A.   So transformations fall into this same

1   category and adding variables, that we've got

2   an economic model, and we want to estimate the

3   coefficients of interest. And so we've chosen

4   our controls in order to provide this

5   all-else-equal footing for the programming

6   minute coefficients, okay?

7   And so that's why we choose the

8   controls. We're not trying to interpret the

9   coefficients on those. And so, again,

10   transforming these variables or adding other

11   variables, there's a reason that they're there.

12   So if we put in a variable that we think might

13   be correlated with royalty payments, then we

14   need to keep that all-else-equal basis so that

15   we can accurately estimate the program

16   coefficients.

17   So, again, the transformations, the

18   adding variables, they're going to --

19   undermining this goal of causal inference for

20   the coefficients we care about. So like I

21   would say that the right criteria for thinking

22   about the specifications is to minimize the

23   potential for bias and to make the results as

24   precise as possible. So that's really the

25   criteria for evaluating changes in my view.

1   Q.   Okay.

2   JUDGE FEDER: Excuse me. Could you

3   define transformations for us in this context?

4   THE WITNESS: So a transformation

5   might be, for example, estimating the log of

6   royalty payments rather than estimating the

7   linear -- just the variable alone.

8   And one of Dr. Erdem's changes was to

9   take a log of the control variables. You make

10   decisions about transformations really based on

11   the theory, again, what you think that

12   relationship is going to be between the

13   independent variable and the dependent

14   variable.

15   And so there's really not a -- like

16   not a reason for some of his changes. Now,

17   those were general criticisms. He didn't

18   actually do a transformation in my regression.

19   BY MR. COSENTINO:

20   Q.   All right. Another general criticism

21   has been that you can't do these regressions at

22   all because the royalty payments are based on a

23   regulated price. And so it's a regulated

24   market, so you can't learn anything about

25   pricing in a free market from this market.

1   Do you agree with that?

2   A.   So that claim has come up in several

3   contexts. And it's wrong. It's wrong. And to

4   see this, we can go back to something we talked

5   about before, that there's a lot of information

6   in the decision to carry a signal or not to

7   carry a signal, to put it in one subscriber

8   group and not another, to cover three-quarters

9   of the market or a tenth of the market.

10   And so this information, when the

11 firms have to pay a royalty fee for this, and

12 the signals have different royalty prices, and

13 so they need to make a decision to include or

14 to not include. If they pull signals out of

15 the market, stop carrying them, they can save

16 some money. And so we can estimate demand from

17 the regulated prices.

18   What we need aren't regulated prices.

19 We need -- I mean, what we need aren't free

20 market prices. We need free decisions. It's

21 the decisions that matter in these regressions.

22   And so the regulated prices are --

23 it's really not -- we can do just fine with

24 them. So maybe there's some more margin of

25 error, but that's why we estimate an error term

1   in a regression coefficient -- in a regression

2   model.

3   Q.   All right. And there's another

4   argument related to the regulated nature of the

5   market, that the minimum fees make it

6   impossible to discern relative marketplace

7   value through regression.

8   A.   Yes. So this is another point that

9   comes up a lot in the -- in the rebuttals.

10   And, again, we can estimate the regressions

11   just fine in the presence of minimum fees.

12   And I want to talk about this in a

13   couple of ways. So first of all, this is based

14   on the idea that, well, there's not -- you're

15   not facing an incremental cost if you're not

16   paying a full DSE. So that statement right

17   there isn't right.

18   So if you've got a system with

19   maybe .8 DSE, so they're under the number and

20   so they're paying the minimum fee, well, you

21   can go through and say, well, if you added a

22   Canadian signal to this subscriber group, it

23   would take you over the top. If you added an

24   educational signal to that subscriber group, it

25   would take you over the top.

1   And so you're still facing incremental

2   costs even if you're below this number. Now,

3   maybe you could find one signal and put it in a

4   fraction of your market and not change your

5   royalty fees, but what we learn in that

6   instance is it's not worth the money. So it's

7   not worth the money to add that signal.

8   And so minimum fees do add some

9   uncertainty bounds to our estimate. So this is

10 -- regression models don't predict exactly what

11 firms will do. And we have an error term. And

12 so the -- we do lose some precision from having

13 some minimum fee systems.

14   But we can accurately get these

15 average values.

16   Q.   All right. Let me --

17   A.   We've got to talk about dropping them,

18 though.

19   Q.   I'm sorry?

20   A.   I'm talking too much. You're talking

21 too little. I understand.

22   Q.   Okay. Let's -- maybe we can pick some

23 more of that up --

24   A.   Yeah.

25   Q.   -- as we go through the specific

1   criticisms of your regression.

2   Now, if we go back to your outline,

3   we're going to talk about the third bullet

4   point, which is the adjustments by Dr. Erdem

5   and Dr. Gray. Let's start with the adjustments

6   by Dr. --

7   JUDGE BARNETT: Before we go there,

8   let's have our morning recess, 15 minutes.

9   (A recess was taken at 10:44 a.m.,

10   after which the trial resumed at 11:06 a.m.)

11   JUDGE BARNETT: Please be seated. You

12   will be happy to know that we solved quite a

13   few international problems while we were in the

14   Judges' chambers this morning.

15   Mr. Cosentino?

16   MR. COSENTINO: Thank you, Your Honor.

17   BY MR. COSENTINO:

18   Q.   Professor George.

19   A.   Yes.

20   Q.   We were about to go back to your

21   outline and address the third bullet point

22   about Dr. Erdem's and Dr. Gray's adjustments to

23   your regression.

24   Let's start with Dr. Erdem's. My

25   question for you is, now, Dr. Erdem did some

1   changes to the variables in your regression,

2   correct?

3   A.   That's correct.

4   Q.   Okay. We have already kind of

5   addressed those to a certain extent and your

6   general criticisms?

7   A.   Yes. So we have addressed that adding

8   distant subscriber minutes is one example of

9   adding a variable to a regression that

10   undermines the interpretation of the

11   programming minutes that we care about.

12   And so we can't use the results any

13   more. So that -- he made two adjustments to my

14   regression that added those distant subscriber

15   minutes and they don't mean anything.

16   Q.   All right. He also separated out

17   coefficients for Devotional programming from

18   Program Suppliers' programming, correct?

19   A.   That's correct.

20   Q.   Okay. Can you address that?

21   A.   So in my analysis I estimate the -- I

22   estimate regression coefficients for Canadian

23   Claimant programming on Canadian signals, Joint

24   Sports programming on Canadian signals, and

25   Program Suppliers' programming with SDC

1   comments -- content together.

2   And I made this choice because the

3   amount of Devotional Claimant programming is

4   extremely low, and it is -- it is carried on a

5   small number of signals.

6   And regression is a wonderful tool for

7   organizing information but it can't do

8   everything. It requires some variation in the

9   choices and the minutes to make an estimate.

10   And because the number is so low and

11   it is on few signals and also because it is

12   very correlated with the Program Suppliers'

13   share, I made a determination that it just

14   wasn't going to be possible to separately

15   estimate that coefficient.

16   So when Dr. Erdem splits it out, it is

17   very clear that there are kind of

18   multicollinearity problems, like the variables

19   are functions of each other, and so those

20   results are not meaningful.

21   Q.   All right. And Dr. Erdem also treats

22   your negative coefficients differently; is that

23   correct?

24   A.   That's right. So separate from the

25   regression coefficients, when he translates the

1   regression coefficients into shares, rather

2   than using the estimated coefficient, which is

3   precisely estimated and a valid coefficient, he

4   replaces it with a zero.

5   And this was also done in other

6   rebuttal testimony, arguing that this is

7   something Dr. Waldfogel did in the 2004/2005

8   analysis. But the circumstances are quite

9   different. It was a little bit of a question

10   whether that was the right approach even in

11   Dr. Waldfogel's analysis, but he did a good job

12   explaining the probability that the coefficient

13   was less than zero/greater than zero.

14   But in my case I have a negative

15   valuation, which is precisely estimated, so

16   within standard confidence intervals, and it is

17   -- it makes sense from theory. So it is

18   completely arbitrary to replace a coefficient

19   in a regression model with another -- another

20   number. It is just bad econometric practice.

21   And so, in any event, I don't think

22   that that's a valid change at all.

23   Q.   All right. Now, Dr. Gray also does

24   adjustments to your regression analysis, right?

25   A.   He does.

1   Q.   And one of -- is one of them the same,

2   replacing the negative coefficient?

3   A.   So that's true. He also replaces the

4   negative coefficient. Dr. Gray goes a step

5   further in some of his other analysis in that

6   he replaces coefficients that are not precisely

7   estimated. He replaces those with zeros as

8   well in some of his adjustments.

9   And, again, this is -- there is a

10   difference between a precisely-estimated zero

11   and a coefficient that we can't really

12   interpret because the confidence interval is

13   large.

14   So this replacement of coefficients in

15   my case where he replaces the negative

16   coefficient with a zero or in any other cases

17   where he is replacing coefficients with zero is

18   -- this is, again, bad econometric practice.

19   Q.   All right. And Dr. Gray also reruns

20   your regression just using systems that pay in

21   excess of the minimum fee.

22   Do you have an opinion on that?

23   A.   Yes. So we were talking about this in

24   the general -- in the response to general

25   high-level criticisms of regression. So when

1   we estimate our models with minimum fee

2   systems, we know there's some extra -- there is

3   some uncertainty there so there's some wider

4   confidence intervals. Our estimates are less

5   -- less precise.

6   But if you toss those out, which is

7   what Dr. Gray does, you do something much worse

8   in that you bias the sample because you are

9   pulling out systems that -- where their choices

10   are very valid.

11   So pulling out -- pulling out systems

12   or terms from the regression is, again, bad

13   econometric practice.

14   And, as I mentioned before, there

15   really is a lot of value in information, in the

16   systems that are below the one DSE, especially

17   in this post-STELA -- post-STELA world. So we

18   learn --

19   Q.   Let me ask you. Before we go on to

20   STELA, in sum, with regard to the adjustments

21   made by Drs. Gray and Dr. -- Dr. Gray and

22   Dr. Erdem, did their adjusted regressions tell

23   us anything about the relative market value of

24   Canadian Claimant programming?

25   A.   No, they don't tell us anything at

1   all.

2   Q.   All right. Now, you were going to go

3   on to STELA and I think in the context of the

4   minimum fee, right? So what is STELA?

5   A.   So my -- I don't know the full

6   acronym, but my understanding of the change in

7   law in 2010 allowed cable systems to pay for

8   distant signals at the subscriber group level.

9   And Dr. Crawford's testimony talks about it.

10 Mine talks about it.

11   This is a real change. It is a real

12 change in the decisions that the cable systems

13 can make. And it's -- had -- it had very,

14 pretty clear effects on the market.

15   There is much more targeting of

16 distant signals to small groups within cable

17 systems. And so there is various evidence that

18 I have looked at in these proceedings that show

19 that.

20   And what it does say, there is sort of

21 two reasons that it's important. So the first

22 is as we were talking about, minimum fees.

23 We're getting more information now. And so

24 when a system can -- they are

25 offering .7, .8, .9 DSEs of coverage, yes,

1   they're paying, they're technically paying the

2   minimum fee.

3   But as they look at should I add

4   another signal, should I add another signal, or

5   should I expand a signal from a tenth of the

6   market to the whole market? There are

7   incremental costs there.

8   So we're -- we have incremental

9   cost -- we have information on incremental

10   costs even in minimum fee systems.

11   The second thing that STELA did is it

12   really increased the information we have to

13   estimate the regressions.

14   Q.   I want to come back to that a little

15   bit later, that second point.

16   A.   Oh, okay.

17   Q.   But, okay, what I would like to do at

18   this point is move on to your fourth bullet

19   point about Dr. Israel.

20   Now, Dr. Israel also addressed or

21   modified your regression analysis; is that

22   correct?

23   A.   He did.

24   Q.   Okay. Now, and he presented his own

25   regression analysis?

1   A.   He presented his own regression

2   analysis, yes.

3   Q.   Okay. So let's start with his

4   regression analysis and its effect and his

5   number for the CCG shares. Okay?

6   In your report you address two issues:

7   The classification issue and a model

8   specification issue. Let's start with the

9   classification issue.

10   A.   Okay. So I always like to think of

11   the model as coming first, but we can talk

12   about the data.

13   Q.   Let's do the model first, sure.

14   A.   The model is the first thing, right?

15   We specify -- it's what we do when we're

16   evaluating markets. We write down what we

17   think the market -- what we think the market

18   is, what the institutions are.

19   And so Dr. Israel's model is, as we

20   say, like it is a Waldfogel-style regression.

21   It does draw inference from carriage choices.

22   But from the Canadian Claimant

23   perspective, it doesn't properly take into

24   account the retransmission zone.

25   And so it is effectively treating

1   decisions to not carry Canadian stations in,

2   you know, Alabama, in Texas, as choices coming

3   from value where really they are prohibited.

4   And so this is a limitation of the model.

5   And in my rebuttal testimony, I -- I

6   address the model. So I -- I amend the model.

7   Q.   Okay. Now, there was a second issue,

8   which was a classification issue. Can you

9   explain that one?

10   A.   So regression models are at some level

11   as good -- you can have the exact right model,

12   but you need to have good data to estimate it.

13   And the data on Canadian signals, the program

14   classification on Canadian signals that

15   Dr. Israel used contains, like, massive,

16   massive misclassification, massive

17   classification errors.

18   The source of data for classification

19   on Canadian distant signals is ultimately --

20   was prepared by Ms. Boudreau at CCG but the

21   source of data is the Canadian Radio Television

22   Commission logs.

23   So there is a regulatory structure, as

24   I understand it, in place in Canada to -- to

25   record domestic content, record the country of

1   origin.

2   And so these -- this is the source of

3   program classification for my analysis. It is

4   also the source of classification for Canadian

5   signals in Professor Crawford's analysis.

6   Dr. Israel, on the other hand, used a

7   commercial data source that contained almost no

8   information on the country of origin's

9   programming. So I worked with the original

10   CRTC logs and merged them to the Canadian

11   programming, the Canadian logs, and I found

12   just, you know, like -- well, my Table 1 shows

13   a very large number of misclassified programs.

14   About 23 percent of the programming on

15   Canadian distant signals was incorrect in

16   Dr. Israel's report.

17   And so, as a result, we really can't

18   use his estimates to talk about Canadian

19   valuations.

20   Q.   Okay. Now, did you adjust -- you

21   adjusted the model you testified earlier. Did

22   you rerun his regression with adjusted content

23   categorization as well?

24   A.   So I made two changes: I adjusted his

25   model to take into account the retransmission

1   zones. So I effectively estimated a regression

2   coefficient for the programming minutes inside

3   and outside of the zone. That's kind of how

4   that -- how that works.

5   And I reported, if we're going to look

6   at the table, but I reported the results with

7   just the corrected model and the incorrect data

8   and then the results with both.

9   Q.   Let me pull that up. That's in your

10   testimony as well, right?

11   A.   It is -- yes. I can't quite remember

12   the table number.

13   Q.   Okay. So this is Exhibit 4007, page

14   22, Table 5. Is this it?

15   A.   Yeah, Table 5. So we can just

16   restrict our attention to the top portion here,

17   unless there are questions. But the first --

18   can we just go back? I need to read the

19   titles, too.

20   So column 1 uses the original JSC

21   classification. And column 2 uses the CCG. I

22   substituted the CCG classification. Both of

23   these have the adjusted model for the Canadian

24   zone.

25   And when I adjust Dr. Israel's

1   regression, the shares that I estimate for

2   Canadian Claimant programming, 6.97, is much

3   more in line with the -- or it's closer to the

4   estimate that I get using my model.

5   Q.   Okay. So the first column is just the

6   model; the second column is model plus?

7   A.   Model and data, yes.

8   Q.   And can you explain the bottom part of

9   this chart?

10   A.   So, as I mentioned, the technique that

11   I used here is to effectively estimate the

12   programming minute coefficients inside and

13   outside of the Canadian zone.

14   And so the bottom part of the table

15   really breaks down the estimates into the

16   Canadian zone and outside of the Canadian zone.

17   And so we -- the numbers at the top

18   are a sum. So the Sports Claimants share is

19   the share inside the zone, and the share

20   outside the zone, and that gives us the 30.47

21   share.

22   And so we have a zero -- we don't

23   estimate any value for Canadian Claimant

24   programming outside of the zone -- but we allow

25   the coefficients for all the programming types

1   to reflect that the choice set is different.

2   Q.   Okay. Thank you.

3   JUDGE BARNETT: Excuse me. The sum in

4   the top section of your table --

5   THE WITNESS: Yes.

6   JUDGE BARNETT: -- shows a value for

7   devotional, which appears to be all from inside

8   the Canadian zone. There are distant signals

9   carrying devotional programming outside the

10   Canadian zone.

11   THE WITNESS: So I'm estimating

12   Dr. Israel's model here. So I have adjusted

13   it.

14   And so, first of all, there is some

15   rounding. So it can be -- can be -- can be

16   below. I would have to go back to look to see

17   if, you know, at what decimal place we had a

18   coefficient, we had a coefficient there.

19   But even -- it is not that it is --

20   the Canadian estimate is just not -- we don't

21   estimate it outside the zone. Here we get a

22   zero. We get, at this level of decimal places,

23   we have a zero.

24   JUDGE BARNETT: Okay. Thank you.

25   BY MR. COSENTINO:

1   Q.   All right. And, Professor George, do

2   you believe that this 6.97 number that you get

3   in the second column for your CCG

4   classification properly estimates four years

5   worth of CCG value?

6   A.   So the JSC sample only includes 2010

7   to 2012. And we know from the trends in

8   carriage, in my report and in Dr. Crawford's

9   report, that in 2013 there's -- the Canadian

10 share is higher. There is more carriage and

11 the signals have more Canadian Claimant comment

12 -- content.

13   So my view is that this is -- this is

14 lower than if we were able to estimate this on

15 all four years of data.

16   Q.   Okay. Now, Dr. Israel then in his

17 rebuttal also adjusts your regression, correct?

18   A.   That's correct.

19   Q.   All right. And let's talk about that.

20 Again, there is the issue of the, as we

21 discussed with Dr. Erdem and Dr. Gray, how does

22 Dr. Israel handle the negative coefficients in

23 your regression?

24   A.   So when Dr. Israel modifies, this

25 isn't a modification to the regression. It is

1   a modification to the analysis of using the

2   regression coefficient.

3   But he also removes the weighting,

4   claiming that it is more consistent with

5   Waldfogel. But it is really -- they really are

6   quite different in that I have a

7   precisely-estimated, statistically significant

8   negative coefficient.

9   So that's one of the changes that he

10   makes.

11   Q.   Okay. And when Dr. Israel reruns your

12   model, does he use your data or his data?

13   A.   So that's important. His claim that

14   my -- so Dr. Israel claims that my results are

15   driven by the use of aggregate data on U.S.

16   distant signals. So that is a difference. I

17   have got -- I don't have the breakdown of

18   programming minutes that he does.

19   But he supports that claim by running

20   my model with a breakdown with his flawed data.

21   And so, in fact, the differences are really

22   driven by the treatment of the Canadian zone.

23   That's really what drives the difference.

24   And we can see that because when I

25   adjust his model to give us a separate

1   coefficient inside and outside of the zone, the

2   numbers are more in line with each other.

3   Q.   All right. Thank you.

4   Now, let's jump back to your outline

5   and I think we're down to the last bullet

6   point. Would you agree with me?

7   A.   I think so.

8   Q.   All right. So let's talk about

9   Professor Crawford's analysis. You reviewed

10   his corrected analysis, right?

11   A.   I did.

12   Q.   And did you review Professor

13   Crawford's data?

14   A.   I looked at his data, his programs,

15   yes.

16   Q.   Did you run them?

17   A.   I ran lots of them.

18   Q.   Reviewed the results?

19   A.   Yes, reviewed the results.

20   Q.   So what was your overall impression of

21   Professor Crawford's analysis?

22   A.   So my overall view of Professor

23   Crawford's work is that it is a very sound

24   estimate of all the Claimant categories

25   together.

1   I do have an adjustment to it, because

2   it doesn't fully take into account the

3   difference in the retransmission zone and the

4   rest of the U.S., but the specification he uses

5   with system-fixed effects partially takes that

6   into account. So his results don't change as

7   much when I adjust them.

8   I think that using the criteria of

9   estimating our coefficients with the minimum

10   bias possible, the minimum potential for bias

11   and maximum precision, the fixed effects model

12   is a good use of -- it is a good use of data,

13   it is a good use of the information that we now

14   get post-STELA on subscriber -- on subscriber

15   groups.

16   And so it is a very good use of data

17   and it reflects the modern institutions. It is

18   not the same. He makes inference from

19   different -- there is different aspects of

20   inference in his model. So we don't get the

21   same coefficient, but I do think that his model

22   is very good.

23   Q.   All right. You mentioned subscriber

24   groups. Now, he uses subscriber groups and you

25   and Dr. Israel do your regression at the system

1 level.

2   Can you explain the difference there?

3   A.   So Dr. Crawford's model looks at

4 royalty payments linked to the subscriber

5 group. And so he has, I think, it's a

6 mind-boggling number, like 26,000 observations

7 of subscriber groups over accounting periods.

8   And so there is a lot of decisions

9 that are being taken into account in his

10 regression, so he can be very precise. But the

11 fixed effects model also focuses inference on

12 the changes in carriage within a system over

13 time. It doesn't use information across

14 systems.

15   And so he does get that -- that type

16 of approach is more robust to potentially

17 unobserved data, but it doesn't use all the

18 information.

19   And so I would say this is kind of an

20 econometric choice and we use both types of

21 models. He also has a logarithmic

22 specification so that's another reason that we

23 don't get exactly the same numbers.

24   Q.   All right. And earlier I cut you off

25 when you were talking about STELA. In the

1   context of -- how does STELA affect the

2   information that's available in a regression

3   like Dr. Crawford's?

4   A.   So not just in Dr. Crawford's, in ours

5   as well, but the number of decisions that are

6   now made, this pinpointing of carriage to

7   subscriber groups and decisions I'm going to

8   carry it in a tenth of the market, I am going

9   to carry this signal in half the market, this

10   is giving us more decisions to work with.

11   So it improves the precision of

12   estimates compared to what we have in the past,

13   reduces the standard errors and the margin of

14   uncertainty.

15   And so in my view regression was still

16   a good tool in the past for estimating the

17   relative market value of programming, but now

18   post-STELA it is especially, it is especially

19   good.

20   Q.   All right. You, as you mentioned,

21   made adjustments to Dr. Crawford's regression

22   despite the quality of the regression overall.

23   What type of adjustments did you make?

24   A.   So the adjustment is similar to what I

25   did for with Dr. Israel's approach, in that I

1   interacted the programming minutes coefficient

2   with an indicator for the Canadian zone or not.

3   So just in a more plain language view,

4   I estimated the regression coefficient inside

5   the zone and outside of the zone, and then put

6   them together in calculating shares.

7   And so when I make that adjustment,

8   the Canadian Claimants' share increases from

9   about 4.3 to 4.75. That's the change in

10   Dr. Crawford's, when I adjust Dr. Crawford's

11   model.

12   Q.   Okay. Did you have to adjust his

13   classification, his program categorization at

14   all?

15   A.   No. His categorization uses the same

16   source.

17   Q.   Okay. So I just want to go and take a

18   quick look in your report, which is

19   Exhibit 4007, page 28.

20   Do these tables present your results

21   of adjusting Dr. Crawford's regression?

22   A.   Yes, they do. The top shows -- yes,

23   they do.

24   Q.   Okay. And can you just -- what does

25   the top show compared to the bottom? Just

1   contrast them for us.

2   A.   So the top panel is showing the

3   comparison. So really column 1 and column 2

4   are the comparison of Dr. Crawford without my

5   adjustment and then with my adjustment.

6   And then the bottom portion does an

7   annual breakdown.

8   Q.   All right. And so in the bottom these

9   are your adjusted regressions for 2010 through

10   2013 taking into account the regulated market

11   for Canadian signal?

12   A.   That's correct.

13   Q.   All right. Now, Dr. Crawford offered

14   two regressions: One he refers to as his

15   initial analysis and one he refers to as his

16   de-duplicated analysis. What did you work with

17   here?

18   A.   I adjusted his initial analysis. I

19   did not work with the de-duplicated dated.

20   Q.   Okay. Just generally what are your

21   views of his de-duplicated results?

22   A.   So I thought it was an insightful

23   contribution to the estimation of relative

24   market value in these proceedings. I discuss

25   at some length in my direct statement the --

1   that -- what we know from the literature and

2   research on these markets is that cable systems

3   value differentiated programming.

4   They value programming that can bring

5   in subscribers, increase prices, and that in a

6   subscription-based market it is this

7   differentiation that is really important.

8   And the duplicative analysis takes

9   that into account. It estimates the value --

10   puts emphasis on the differentiated content.

11   Q.   I'm sorry. I think you said

12   duplicative analysis. You meant

13   de-duplicative?

14   A.   Yes. In the analysis that removes

15   duplicated data, he puts more emphasis on

16   differentiated programming and it is not a

17   surprise that the coefficients in that analysis

18   are somewhat higher.

19   Q.   Why didn't you do your adjustments to

20   his de-duplicated?

21   A.   So the de-duplication process was a

22   massive data and analytical task and so it was

23   something I didn't see as really essential to

24   my adjustments. However, I do think it was --

25   it is a good contribution to these proceedings.

1   Q.   Okay. Do you have a sense of what

2   would have happened to your results if you --

3   your adjustment results for the Canadian

4   Claimants group, if you had done an adjustment

5   to his de-duplicated analysis?

6   A.   I think the incremental change in the

7   Canadian Claimant share would have been very

8   similar. So we would end up with the same,

9   really very close to the same or higher shares

10   than we have now, which is what we got -- what

11   the de-duplicated analysis produced without my

12   model adjustment.

13   Q.   Professor George, in sum, based on

14   your regression and that of Professor Crawford

15   and Dr. Israel, what would you say is the best

16   indicator of relative market value for Canadian

17   Claimant Group programming?

18   A.   So I would say that the true value

19   lies in the range between the -- my adjusted

20   Crawford regressions of 4.75, and the estimates

21   that I prepared for CCG of 7.11.

22   So I think that that's the range that

23   we're talking about.

24   Q.   All right. Thank you, Professor.

25   MR. COSENTINO: Your Honor, I have no

1   further questions at this time.

2   JUDGE BARNETT: Thank you.

3   Anything from the Bench? Thank you,

4   Professor George. You may be excused.

5   JUDGE FEDER: Wait. Cross?

6   MR. MacLEAN: Your Honor?

7   JUDGE BARNETT: I'm sorry.

8   MR. MacLEAN: There may be some

9   cross-examination.

10   (Laughter.)

11   JUDGE BARNETT: Anybody else want to

12   ask any questions of this witness? I'm sorry,

13   I was on a flashback to Professor Conrad --

14   Conrad? I'm sorry, temporary ischemia.

15   Who is going first on the

16   cross-examination? Mr. Laane?

17   MR. LAANE: I guess I will, Your

18   Honor.

19   JUDGE BARNETT: All right.

20   CROSS-EXAMINATION

21   BY MR. LAANE:

22   Q.   Good morning, Dr. George. My name is

23   Sean Laane and I represent the Joint Sports

24   Claim.

25   So I understand your opinion that

1   regression is, as I think you put it in your

2   report, a suitable method for estimating

3   relative market value.

4   Would you agree regression also can be

5   a suitable method for determining whether or

6   not the results of other types of studies in

7   this proceeding are corroborated?

8   A.   Well, this notion of corroboration is

9   something a little bit outside of science and

10   economics. I can say if the assumptions are

11   similar and the data are similar, I can make

12   comparisons, but I think I would need to kind

13   of have some specifics in order to really talk

14   about that.

15   Q.   Okay. Well, in your written testimony

16   you cited the Judges' determination in the

17   2004/'05 proceeding. Do you recall that?

18   A.   Do you want to show it to me?

19   Q.   I can -- if you can, give me the ELMO,

20   please, Geoff.

21   You may or may not have seen it in

22   this format. You might have seen it in a

23   typewritten format. But this is the Judges'

24   determination in the 2004-'05 proceeding, which

25   was cited in your written direct testimony at

1   page 6, footnote 3.

2   A.   Page 6, footnote 3.   Okay.

3   Q.   So you remember now you reviewed that

4   determination?

5   A.   Oh, yes.   I wanted to know what the

6   context was.

7   Q.   Okay.   And do you recall that the

8   Judges concluded in that determination that

9   Dr. Waldfogel's regression was useful in a

10   couple of ways and they said that one of those

11   ways was to at least, in some rough way,

12   corroborate the Bortz augmented survey results?

13   A.   Um-hum, yeah, I agree with that.

14   Q.   You agree with that.   All right.

15   Thank you.

16   Now, I want to ask you just a little

17   bit about your regression analysis discussed in

18   your written direct testimony, Exhibit 4005.

19   And as you told us, that regression only looked

20   at systems located in what you called the

21   Canadian zone, right?

22   A.   Um-hum.

23   Q.   And you had said systems outside the

24   Canadian zone were prohibited from carrying

25   Canadian signals.

1   Would it be more accurate to say

2   outside the Canadian zone, cable systems are

3   not entitled to claim the Section 111 license

4   if they want to carry Canadian signals?

5   A.   So my understanding is that they can't

6   retransmit these under the compulsory license.

7   Now, whether they can go and negotiate other

8   arrangements, I don't really know the details

9   of the law on that.

10   Q.   Okay. You are not saying the law

11   would prohibit them from going out in the free

12   market and negotiating carriage of a Canadian

13   signal.

14   What you know is just they can't say

15   I'm going to take the compulsory license so I

16   can do this?

17   A.   Right. Right.

18   Q.   Okay. And in your regression that you

19   performed, you only attempted to compute a

20   share for the Canadian Claimants, right?

21   A.   That's correct.

22   Q.   Okay.

23   A.   That's correct.

24   Q.   So the Judges couldn't make use of

25   your regression to parse out shares to, you

1 know, Sports or Program Suppliers or any of the

2 other groups?

3   A.   Absolutely not.

4   Q.   Okay. And my understanding is you did

5 that because you didn't have programming

6 information for U.S. distant signals?

7   A.   So I didn't -- I used aggregate data

8 because I didn't have programming for the U.S.

9 distant signals, but I didn't estimate in the

10 Canadian zone for that reason. I estimated in

11 the Canadian zone because of the retransmission

12 rules.

13   Q.   And the lack of data on the

14 programming content on U.S. distant signals,

15 that is available information, data that could

16 have gone out and been purchased in the

17 marketplace, right?

18   A.   Could have purchased that.

19   Q.   Okay. But you chose not to do so?

20   A.   So, yeah, we made a cost/benefit

21 tradeoff. It wasn't needed for estimating the

22 Canadian Claimant share, and, you know, as a

23 small Claimant group, these are pretty massive

24 expenses.

25   Q.   Okay. I feel your pain.

1   So focusing on the Canadian signals,

2   you did sort that programming out into

3   different categories because not all programs

4   on Canadian signals belong to the Canadian

5   Claimants, right?

6   A.   That's correct.

7   Q.   Okay. So, for example, if the

8   Washington Capitals are playing the Montreal

9   Canadians on a Canadian signal that gets

10   distantly picked up, that would go in the JSC

11   category, right?

12   A.   So I am not the expert on what goes

13   where, but that's my understanding.

14   Q.   Okay. And when you ran your

15   regression you computed basically three

16   coefficients, right, Canadian programming on

17   Canadian signals, JSC on Canadian signals, and

18   then a combined Program Suppliers and

19   Devotional on Canadian signals; is that right?

20   A.   That's correct.

21   Q.   Okay. And if we look at amended Table

22   3 on page 6 of your corrected amendment, which

23   was Exhibit 4006, that's where it shows your

24   relative value coefficients, right?

25   A.   So, I'm sorry, we're in the corrected

1 amendment? This is -- do you have it to put on

2 the screen or no? So table -- which table do

3 you want to look at?

4   Q.   Actually, it is --

5   A.   Amended Table 3?

6   Q.   Amended Table 3, so it is at page 6.

7   A.   Yes, amended Table 3.

8   Q.   Okay. And we have got it. And the

9 highest relative value per minute you found was

10 for JSC programming, correct?

11   A.   Value per minute, yes.

12   Q.   Okay. And that was over ten times the

13 value per minute of Canadian minutes?

14   A.   Per minute? Yes.

15   Q.   Okay. Thanks. You can take that down

16 now, Geoff.

17   And in your -- in your corrected

18 written direct testimony, you said "an

19 accounting approach referred to as fee

20 generation has been used in prior proceedings

21 to calculate distant signal values using

22 royalty expenditures."

23   Do you recall that?

24   A.   Yes.

25   Q.   And you say it has been used. Who has

1   it been used by in the past?

2   A.   So, well, the Canadian Claimants have

3   used the analysis, this accounting approach in

4   the past. I'm not sure if it has been used by

5   other Claimants, but I think mostly Canadians.

6   Q.   Okay. But you are aware Canadians

7   have used it and you reviewed prior testimony

8   from the Canadian Claimants --

9   A.   I did.

10   Q.   -- on that methodology?

11   A.   And I talk about it in my direct

12   statement.

13   Q.   Okay. And as we discussed, not all

14   the programming on Canadian signals belongs to

15   the Canadian Claimants.

16   And so in the past when the Canadians

17   used that fee generation approach, they would

18   look at the fees generated by the Canadian

19   signals but then also do a constant sum survey

20   to try to assess the relative value of the

21   Canadian programming on those signals, right?

22   A.   Yeah, they didn't have an economist

23   expert at that time.

24   Q.   But that's what they did, right?

25   A.   That's what they did.

1   Q.   And their methodology was to take the

2 fees generated by Canadian signals and multiply

3 it by their share from the survey, right?

4   A.   That's correct, my understanding, yes.

5   Q.   Okay. Geoff, could you put up slide

6 2, please.

7   This is from what's been marked as

8 Exhibit 1092. It is the written direct

9 statement from the Canadian 2004-2005. And we

10 see here the basic concept underlying our claim

11 is that CCG should be awarded a share, blah,

12 blah, blah, measured by a share of the

13 royalties paid for Canadian signals, coupled

14 with the cable operators' valuation programming

15 those signals.

16   Is that what you were referring to as

17 the fee generation approach?

18   MR. COSENTINO: Your Honor, I am going

19 to object to this line of questioning. This

20 was legal argument in that proceeding. This is

21 not evidence in that proceeding.

22   MR. LAANE: I am just showing her what

23 was proffered by the Canadian Claimants as

24 their description of what their methodology was

25 to confirm that it is consistent with her

1   understanding of fee generation.

2   JUDGE BARNETT: The objection is

3   sustained. The statements of the attorneys are

4   not in evidence.

5   MR. COSENTINO: Thank you.

6   BY MR. LAANE:

7   Q.   Dr. George, your general understanding

8   is that Canadian methodology was to take the

9   fees generated on Canadian signals and then

10   discount that according to what their survey

11   showed as the relative value of Canadian

12   programming on Canadian signals, correct?

13   MR. COSENTINO: Your Honor, objection

14   again. It is the same question restated. I

15   think it is the same point. This is all legal

16   argument.

17   JUDGE BARNETT: And she is not an

18   attorney and we're not taking her testimony as

19   legal -- as a legal response, but what she

20   understood might have affected the way she

21   proceeded with her -- it is only --

22   MR. LAANE: Geoff, you can take down

23   the slide. I am not asking about the legal

24   argument, Your Honor, but in her direct

25   testimony, she says there is this methodology

1   fee generation. The Canadians used it in the

2   past.

3   She produced their testimony from

4   '04-'05 in her underlying documents. I think I

5   am entitled to know her understanding of fee

6   generation.

7   JUDGE BARNETT: I would have asked to

8   hear from you, Mr. Laane, if you had let me

9   finish my sentence.

10   MR. LAANE: I'm sorry, Your Honor.

11   JUDGE BARNETT: Nonetheless, what she

12   used as the basis for her testimony is open for

13   question and so the objection is overruled.

14   MR. COSENTINO: All right. Thank you,

15   Your Honor.

16   THE WITNESS: So I will go back to

17   what I kind of said at the very beginning,

18   developing my methodology for estimating

19   Canadian Claimant programming. I looked at

20   what had been done in the past. This is what

21   you do in science. You look at the literature.

22   You see what people have done. You see where

23   you can improve upon it. You think about the

24   strengths and weaknesses.

25   And so in my direct statement I talk

1   about the accounting method that came to be

2   known as fee generation and how I sort of

3   digested it in my analysis. But basically I

4   have a different approach.

5   BY MR. LAANE:

6   Q.   I understand you have a different

7   approach. But your understanding of how it

8   worked was they would look to see the amount of

9   fees generated on Canadian signals and then

10   multiply that times the percentage they got for

11   Canadian programming in the Canadian survey,

12   right?

13   A.   Yes. Yes, sir.

14   Q.   Did you take a look to see what the

15   result would be if you did that in this case?

16   A.   No, no. I -- I -- I'm not -- I don't

17   take that approach, no.

18   Q.   Did you look at data showing what the

19   fees generated were by Canadian signals during

20   2010 through 2013?

21   A.   So I have reviewed the testimony of

22   Jonda Martin in these proceedings, and I

23   discuss -- I discuss the signal valuation in my

24   direct statement.

25   And part of my goal there was to talk

1   about differences in these allocations. But

2   post-STELA, this accounting allocation is very

3   different. So it is -- it is not necessarily

4   comparable to the past.

5   Q.   And Jonda Martin's reported fees

6   generated for Canadian distant signals for this

7   period 2010 through 2013 were estimated to be

8   3.1 percent, right?

9   A.   I would have to look at the -- the

10   testimony there. But she did some sensitivity

11   analysis of allocation of fees. There is not

12   one number that I would say is -- is her final

13   estimate.

14   Q.   Okay. Could you give me the ELMO,

15   please, Geoff. So the testimony of Jonda

16   Martin already admitted into evidence as

17   Exhibit 4009, and if we look at, this is on

18   page 10, we can see Ms. Martin says: Fees for

19   Canadian distant signals are estimated to be

20   3.1 percent, correct?

21   A.   Which table are you looking at, 2A or

22   2b?

23   Q.   I am looking at the sentence above 2b

24   and also at 2b.

25   A.   So this is one -- yeah, this is one

1 version of her royalty allocation, 3.1, yes.

2   Q. Okay. Did you also look at the survey

3 by Dr. Ringold?

4   A. No.

5   Q. Do you know what percentage she found

6 for the Canadian Claimants in that survey?

7   A. I -- I do not. I am not a fan of the

8 surveys, no, don't use it in my analysis.

9   Q. All right. If we could go now to

10 Table 8 in your corrected written direct

11 testimony, page 38, and we have it up here on a

12 slide as well.

13   A. In the rebuttal -- in my rebuttal

14 report? · What page is this?

15   Q. It is at page 38.

16   JUDGE STRICKLER: It is not in the

17 rebuttal report. It is in the direct.

18   THE WITNESS: Oh, I'm sorry, this is

19 in --

20 BY MR. LAANE:

21   Q. It is in the corrected direct, yes.

22   A. Corrected direct, 4006. Okay.

23   Q. You should have it on your monitor.

24   A. I know. I want to see it in context.

25 Sorry. Do you want to give me a page? That

1   will make me go faster.

2   Q.   Page 38. It is right near the very

3   end.

4   A.   Got it. Got it. Got it.

5   Q.   And this table is called Distant

6   Subscriber-Weighted Minutes on Canadian

7   Signals.

8   So, first of all, can you just explain

9   what you mean by distant subscriber-weighted

10   minutes?

11   A.   So we are counting up the subscribers

12   who have access to this programming to give us

13   a better feel, because counting just systems

14   doesn't give you really a full picture of how

15   many people are exposed to programming.

16   Q.   Okay. And so how do you compute the

17   number?

18   A.   So we use the distant subscribers that

19   have access to that -- that have access to that

20   signal times the -- yeah, so if the signal is

21   distributed to three-quarters of the market, or

22   three-quarters of the subscribers, we multiply

23   that by the -- we multiply that by the minutes.

24   Q.   Okay. And under each column you have

25   figures labeled Change 2004-2013 and Percent

1   Change 2004-2013. Do you see that?

2   A.   Um-hum.

3   Q.   And in computing those figures, you

4   compared the single year 2004 versus the single

5   year 2013, right?

6   A.   Yes, I think that's what I did there.

7   Q.   You didn't compare the period 2004

8   through '05 with the period 2010 through 2013?

9   A.   Right. In this table, because we

10   don't have all the years, we just have the

11   preceding years, so, yes, that percentage is

12   from beginning to end.

13   Q.   Just from the single year 2004 versus

14   single year 2013?

15   A.   I think so, yes.

16   Q.   And if you had compared the two

17   periods against each other, you actually would

18   have gotten quite different results, right?

19   A.   I don't know about quite different,

20   but the numbers wouldn't be exactly the same.

21   Q.   All right. Well, for example, in the

22   result labeled 24-hour broadcast day, you are

23   showing a decline for Joint Sports, right?

24   A.   Yeah, there is one -- yeah, that year

25   is lower.

1   Q.   But if you compared the period 2004-05

2   versus the period 2010 through '13, JSC minutes

3   actually increased over 20 percent, right?

4   A.   Let's see. You are doing the math in

5   your head but, yeah, okay. I believe you. I

6   believe you.

7   Q.   Okay. And in that same section you

8   show an 8.69 percent increase for Canadians

9   comparing the single year 2004 versus '013.

10   But if we compare the period '04-'05

11   through 2010 through '13, will you accept my

12   representation we actually get a 1.7 percent

13   decrease for the Canadians?

14   A.   Yeah. So, let's see, 2004/2005, yes,

15   on the left panel that's -- that's the case.

16   Q.   Okay. Now I want to ask you a little

17   bit about your adjustments to Dr. Israel's

18   regression.

19   And as you told us earlier, there were

20   two basic things that you did: You replaced

21   his categorizations of Canadian programming

22   with what we will call, I think you call it in

23   your report, the CCG categorizations, right?

24   A.   Correct.

25   Q.   And you made some changes to the

1   control variables in his model and interacted

2   those with the coefficients for the agreed

3   categories?

4   A.   Right.

5   Q.   Okay. Focusing just on the first

6   change categorization, the overwhelming

7   majority of the differences between his

8   categorizations and the CCG categorization

9   involve Canadian signal programming that Israel

10   had in the Program Suppliers category, you

11   concluded belonged in the Canadian category,

12   right?

13   A.   That's right. That's right.

14   Q.   Okay. And if we focus on JSC

15   programming, your categorization actually

16   slightly increased the amount of JSC minutes on

17   Canadian signals?

18   A.   I mean, I am remembering them as very

19   close, but --

20   Q.   Okay. And I know you described for us

21   the difference in the Canadian category. In

22   the other categories, the differences between

23   your categorizations and his were like

24   0.6 percent or less?

25   A.   So I'm not an expert on the other

1 categories. So I didn't really -- I didn't

2 address -- I didn't change them in the

3 analysis. I just used the Canadian -- the

4 Canadian signal programming.

5   Q.   Okay. Now, after you changed the

6 categorizations, did you check to see what

7 would happen if, before changing the model, you

8 just ran your categorizations in Dr. Israel's

9 regression?

10   A.   You have got to change the model

11 first. So, no, I didn't do that analysis. I

12 did the analysis with the model first.

13   Q.   Right. And when you say you have got

14 to change the model first, I mean, I understand

15 that's what you think is your preferred

16 procedure, but in theory you certainly could

17 have taken your categorizations and just run

18 them in Dr. Israel's model, right?

19   A.   Yeah, I could have. They wouldn't

20 have had as big an effect.

21   Q.   Okay. But you simply didn't do that?

22   A.   Well, no. Well, I did -- I need to

23 take into account the Canadian zone, so that's

24 my view, is that the framework for choice comes

25 first, specify the model, then we estimate the

1   model.

2   Q.   Right. Okay. But at no time did you

3   just take your categorizations and run them in

4   Dr. Israel's model?

5   A.   No.

6   Q.   Now, you said you also changed

7   Dr. Israel's model to interact with programming

8   minutes in each category with an indicator

9   variable identifying whether the system lies in

10   the Canadian zone, right?

11   A.   That's the main change.

12   Q.   Okay. And you did that because for

13   systems in the Canadian zone, you believed the

14   regulatory framework impacts demand, right?

15   A.   That's correct. The choices that the

16   cable system operators have are different in

17   that zone.

18   Q.   Okay. So if, in fact, there is a

19   fundamental difference in demand inside and

20   outside the Canadian zone, you could have

21   addressed that by running two separate

22   regressions using the Israel model, right, one

23   inside the zone, one outside the zone?

24   A.   Well, in general we don't do that

25   econometrically because we don't use then all

1   the information. So interaction term maintains

2   the other framework as the same. So the

3   control variables that are included, the -- the

4   time-fixed effects.

5   When you -- in general, you don't

6   split up a sample. That's kind of not good

7   econometric practice. So that's why I use the

8   interaction term so that we keep this sort of

9   cohesive framework and use the variation to its

10   maximum extent.

11   Q.   Okay. It would have been possible to

12   run two separate regressions?

13   A.   It would have been possible, yes.

14   Q.   Okay. Did you take a look at doing

15   that or --

16   A.   Nope.

17   Q.   Okay. Now, if you had run two

18   separate regressions, that would have allowed

19   all of the coefficients to be different inside

20   and outside the Canadian zone, not just the

21   coefficients on the programming minutes, right?

22   A.   That's what would have happened. But

23   it would have also used different variation,

24   but, yes, that's -- that's what we would have

25   gotten as a result.

1   Q.   Okay. And if you could just look at

2 Table 4 in your written rebuttal testimony,

3 page 21.

4   A.   Written rebuttal testimony.

5   Q.   And I am not suggesting, of course,

6 that we agree with your modifications to the

7 Israel regression, but even with your changes

8 you found the highest value per minute for JSC

9 programming, correct?

10   A.   That's correct.

11   Q.   All right. And that's true under

12 either set of classifications?

13   A.   That's true.

14   Q.   Okay. You can take that down now,

15 Geoff.

16   Then you told us you also did some

17 revisions to Dr. Crawford's model. And if we

18 look at Table 6 at page 25 of your written

19 rebuttal testimony, are these the coefficients

20 you found for your revision of the Crawford

21 regression?

22   A.   Um-hum.

23   Q.   Okay. And here, too, you found the

24 highest value per minute for JSC programming,

25 correct?

1   A.   The highest value per minute for JSC,

2   correct.

3   Q.   Okay. And the Canadian zone over 16

4   times more valuable than Program Suppliers

5   programming?

6   A.   So we're here in a logarithmic

7   framework so, you know, we can say that about

8   these coefficients but we need to be careful on

9   interpretation. So this is -- yeah, so this is

10 the -- the log, the log of royalties.

11   Q.   Okay. And if we go to Table 7 on page

12 26, here you have done a chart showing the

13 average marginal value of a distant minute by a

14 program category.

15   A.   Um-hum.

16   Q.   And here, too, you found that JSC had

17 the highest average marginal value per minute,

18 right?

19   A.   It does.

20   Q.   Okay. And over 16 times Program

21 Suppliers' minute in the Canadian zone?

22   A.   Yes.

23   Q.   And about 12 times value of a Program

24 Suppliers' minute outside the Canadian zone?

25   A.   Um-hum.

1   Q.   Okay. And I think you said earlier in

2   your oral testimony that you considered the

3   Crawford model to be, in your words, strong and

4   good?

5   A.   Yes.

6   Q.   Okay. So is it your opinion the

7   estimates in your adjusted Crawford regression

8   are superior to your adjustment to the JSC

9   regression?

10   A.   I do. I do, because of the fixed

11 effects specification.

12   Q.   Okay. And --

13   A.   And the full year's, and all using all

14 year's.

15   Q.   Okay. And your adjustment of the CTV

16 regression, if we could go to slide 9, Geoff.

17   In each year you found the greatest

18 share for JSC, correct?

19   A.   Yes.

20   Q.   Okay. Average of about 34 percent

21 across the four years?

22   A.   Yes.

23   Q.   Okay. And about 37 percent in 2013?

24   A.   Yes.

25   Q.   All right. Thank you, Dr. George. I

1   have no further questions.

2   JUDGE BARNETT: Thank you, Mr. Laane.

3   MR. LAANE: Just in time for a lunch

4   break, Your Honor.

5   JUDGE BARNETT: Just in time. Your

6   timing is impeccable. We will be at recess for

7   one hour. We will reconvene at 1:00 o'clock.

8   (Whereupon, at 12:01 p.m., a lunch recess was

9   taken.)

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1   AFTERNOON SESSION

2   (1:05 p.m.)

3   JUDGE BARNETT: Good afternoon.

4   Please be seated.

5   Mr. MacLean.

6   MR. MacLEAN: Thank you, Your Honor.

7   CROSS-EXAMINATION

8   BY MR. MacLEAN:

9   Q.   Good afternoon, Dr. George. I'm

10   Matthew MacLean. I represent the Settling

11   Devotional Claimants.

12   A.   Okay.

13   Q.   Like with the other fee-based

14   regressions that have been offered in this

15   proceeding, yours is basically seeking to

16   estimate a correlation between the number of

17   minutes of different categories of programming

18   with the amount of fees paid; is that right?

19   A.   That's basically right, yeah.

20   Q.   And your basic theory there is that

21   the cable systems that pay more for

22   retransmission of the distant signals value

23   those minutes on the distant signals more than

24   a cable system that's paying less for the

25   distant signals?

1   A.   Well, they value the programming more

2   than signals not carried, certainly. And

3   across the board, we can make some -- on

4   average, this comparison, yes, we're paying

5   more for certain types of signals and

6   programming then for other types we have higher

7   value, yeah.

8   Q.   Well, let's say we've got two systems

9   carrying the same signals but one system is

10   paying more than the other system. Would you

11   say that the system that's paying more values

12   the signal more?

13   A.   So explain that scenario. So a larger

14   system?

15   Q.   Sure.

16   A.   So a larger system that's paying more

17   has -- there is a higher value in that system

18   we would assign, yeah.

19   Q.   The regression would assign a higher

20   value in that circumstance?

21   A.   Yes.

22   Q.   Even though both systems are

23   retransmitting the same signal?

24   A.   So if you have the signal carried in

25   -- say both systems are covering half their

1   market. There's more value in the larger

2   system, more subscribers, more royalty

3   payments, yes.

4   Q.   I guess I don't quite -- what do you

5   mean by covering half their market?

6   A.   Well, just as an example, if you are

7   broadcasting a signal to a subscriber group

8   that covers half the market, so most of what

9   the regression is working in is a signal

10   covering a tenth of the market, 50 percent of

11   the market, 75 percent of the market, so that's

12   an important variation. And so if you have two

13   signals, two systems, and the signals both

14   covering half that market, there's more value

15   in the larger -- larger system, yeah.

16   Q.   If the signals are covering half the

17   market?

18   A.   Well, okay, it's also if they were

19   covering 80 percent of the market, but as long

20   as we're talking about this same -- the same

21   coverage, that they're being carried for the

22   same share of the market in the regressions,

23   that's what we would get.

24   Q.   You assume the bigger system puts more

25   value in the signal than the smaller system?

1   A.   In the regression, there's larger

2   royalty payment that would come from that, more

3   subscribers in that larger system, so, yes.

4   Q.   And you equate that larger royalty

5   payment with higher value?

6   A.   Yes.

7   Q.   The royalty payment is in your view an

8   indicator of the amount of value that the

9   system --

10   A.   Royalty payments in the regression are

11   generally correlated with the value, yes.

12   Q.   That's what you believe, that the

13   royalties are correlated with value?

14   A.   Right, royalty payments are correlated

15   with value.

16   Q.   If royalty payments were not

17   correlated with value, then you would agree

18   your regression is measuring something other

19   than value, correct?

20   A.   Well, royalty payments on average are

21   -- they're correlated with value. So say your

22   counterfactual again.

23   Q.   If royalty payments were not

24   correlated with value, then your regression

25   would be measuring something other than value,

1   correct?

2   A.   If royalty payments -- I think that's

3   just a statement of fact, but a restatement of

4   if they weren't, right, signifying value. But

5   I believe they signify some value, yeah.

6   Q.   You would agree what I just said was a

7   statement of fact?

8   A.   Yes, I'll go with that.

9   Q.   Okay. You said -- multiple times

10   during your direct testimony, you talked about

11   decisions not to carry or non-carriage

12   decisions. Is that right?

13   A.   Yes, I did.

14   Q.   Okay. Your regression doesn't look at

15   decisions not to carry a signal, does it?

16   A.   Well, these are definitely included in

17   the framework, so if you're carrying a signal

18   in a tenth of a market, you're not carrying it

19   in 90 percent of the market.

20   Q.   Is that a factual statement?

21   A.   Well, if you're carrying -- so if a

22   system is distributing it to a subscriber

23   group, we'll focus if you want to go to the

24   definitions, if a system is carrying a signal

25   that hits 10 percent of its subscribers on a

1   distant basis, and it's not carrying it for the

2   others, then it's not carrying it for

3   90 percent. I guess the exception to that

4   would be if that signal could be carried in

5   part of the system on a local basis.

6   So then that we -- you know, that

7   would be a nuance to the case.

8   Q.   Okay. Well, let's take a look at your

9   direct testimony, Exhibit 4005 at page 14. And

10   could we blow up -- could we focus in on --

11   sorry, let me find it. Okay. Actually, let's

12   go to the page before. We need to start with

13   the page before, okay.

14   Let's blow up that bottom paragraph

15   and take a look at that. Okay.

16   So here you're applying, I think, sort

17   of what you just said, you have an example

18   here, what can be learned about the value of

19   distant signals from the choices of -- in this

20   example -- Buckeye Cable system. "Consider,

21   for example, CBET made available to 93 percent

22   of the system subscribers."

23   And then you give an example here

24   first what would happen if you remove that

25   signal from the lineup, what that would do with

1   fees. Okay, I understand that. And now let's

2   go to the next page, look at the top paragraph.

3   Here you say carriage choices inform the upper

4   bounds as well. "Continuing the example from

5   above" -- this is Buckeye cable system carrying

6   CBET -- "extending carriage of CBET to all

7   system subscribers would require an additional

8   royalty payment of $100,000 times .07, which is

9    $7,000. Since the system operator has made the

10   choice not to offer the signal to the entire

11   market, it is reasonable to infer that the

12   value of that signal for the Buckeye system in

13   2013, accounting period 2, is less than

14   $100,000."

15   Is this an example of how you view the

16   -- the regression working and taking into

17   account non-carriage of signals?

18   A.   Yeah, this example doesn't -- doesn't

19   capture everything, but my goal here is to try

20   to illustrate why non-carriage gives us

21   information about value as well as carriage.

22   So, you know, this isn't hitting every single

23   point but yeah, this is -- that's the idea.

24   Q.   Okay. And so let's take a look at

25   whether -- at whether that assumption holds

1   true here. If we could pull up Exhibit 5032.

2   And --

3   MR. MacLEAN: And, Judge Strickler, I

4   do have a copy for you if you would like to

5   have it.

6   JUDGE STRICKLER: Sure.

7   BY MR. MacLEAN:

8   Q.   Do you recognize Exhibit 5032 as a

9   statement of account?

10   A.   Yes, you sent this yesterday.

11   Q.   And this is, in fact, if you look in

12   part B here, the statement of account for

13   Buckeye Cablevision, Inc., correct?

14   A.   Um-hum.

15   MR. MacLEAN: Your Honor, on that

16   basis, I'm going to move to admit Exhibit 5032,

17   please.

18   MR. COSENTINO: No objection, Your

19   Honor.

20   JUDGE BARNETT: 5032 is admitted.

21   (Exhibit Number 5032 was marked and

22   received into evidence.)

23   BY MR. MacLEAN:

24   Q.   All right. Let's take a look at DSE

25   schedule page 11.1, which is on the 18th page

1   of this document. And let's take a look at

2   block 2. Here you see CBET, right, with the

3   DSE of 1.0?

4   A.   Um-hum.

5   Q.   And if you -- see that little star

6   next to CBET? Do you see the asterisk there?

7   A.   Yes.

8   Q.   And then if you look down to the

9   bottom left-hand corner, you'll see that means

10   partially distant. Do you see that?

11   A.   Um-hum.

12   Q.   You have to say yes or no for the

13   court reporter.

14   A.   Yes. I'm sorry. I'm sorry, I'm

15   focusing -- yes, yes, I see it.

16   Q.   Thank you. And now let's take a look

17   at the last two pages, pages 19-1 and 19-2, of

18   this exhibit. So you'll see here on page 19.1,

19   CBET is offered in this -- in these three

20   subscriber groups, is offered in two of the

21   three subscriber groups on a distant basis,

22   correct?

23   A.   Correct.

24   Q.   And the one subscriber group that it's

25   not offered in is Monroe County, Toledo. Do

1   you see that?

2   A.   Yes.

3   Q.   Okay. That's the one subscriber group

4   where CBET is not carried in the system,

5   correct, on a distant basis?

6   A.   On this page -- in this page, yes,

7   yes.

8   Q.   And now if you go to the next page,

9   this just shows that CBET is carried on a

10   distant basis in the remaining three subscriber

11   groups. Do you see that?

12   A.   Yes.

13   Q.   Now, your theory is that the system

14   chose not to retransmit to Monroe County in

15   order to save that money, right?

16   A.   So that there is a choice, yes, yes.

17   Q.   Okay. Now let's take a look at the

18   eighth and ninth pages of this exhibit, which

19   are entitled form SA3, pages 3.1 to 3.2.

20   And here we have a -- here we can see

21   that there are two channel lineups for the six

22   subscriber groups. Both channel line-ups carry

23   CBET. Do you see that there? And then we can

24   go to the next page. CBET on the second

25   channel lineup too. First channel lineup was

1   subgroups 1 through 3. Second channel lineup,

2   if you look below the part G near the top

3   right-hand corner of the page, is subgroups 4

4   through 6.

5   Do you see that?

6   A.   Yes.

7   Q.   Subgroups 1 through 3 and 4 through 6

8   all receive CBET in their channel lineup,

9   correct?

10   A.   So I'm not -- which is the one that

11   doesn't have CBET then, based on --

12   Q.   Well, according to this --

13   A.   The number of subscriber groups there

14   are --

15   Q.   There are six subscriber groups; 1

16   through 3 receive CBET in their channel lineup.

17   If you'll go to the next page, you'll see 4

18   through 6 receive CBET in their channel lineup.

19   Do you see that?

20   A.   I do.

21   Q.   Okay. Now wasn't -- in Monroe County,

22   you remember, it wasn't carried on a distant

23   basis. So now if I could ask that we pull up

24   Exhibit 5031. And do you recognize 5031 as the

25   FCC's list of significantly viewed stations?

1   A.   Okay. Yes, I recognize this exhibit.

2   MR. MacLEAN: Your Honor, I move

3   admission of Exhibit 5031.

4   MR. COSENTINO: No objection.

5   JUDGE BARNETT: 5031 is admitted.

6   (Exhibit Number 5031 was marked and

7   received into evidence.)

8   BY MR. MacLEAN:

9   Q.   If we could take a look at page 199.

10   Here at the top of page 199, we have the

11   significantly viewed stations for Monroe

12   County. Do you see that?

13   A.   Yes.

14   Q.   CBET was local, regarded to be local

15   in Monroe County; isn't that right?

16   A.   Okay. Yes, it is.

17   Q.   So CBET was not distant for that

18   particular subscriber group, right?

19   A.   Correct, according to this statement.

20   Q.   This cable system, Buckeye County

21   cable system, did not make the choice not to

22   offer the signal to the entire market, right?

23   A.   So if they are broadcasting in all

24   local basis, then that's correct.

25   Q.   Well, In fact, that's quite common,

1   isn't it? Isn't it common for subscriber

2   groups to be used when signals are transmitted

3   locally for some subscribers and distant for

4   others?

5   A.   Well, it's actually quite uncommon for

6   Canadian signals to be distributed -- they're

7   not distributed widely on a local basis, but I

8   do control -- I do control for that in the

9   regressions.

10   So I have a control in the regressions

11   for when different signal types are broadcast

12   on a local basis that gives us our

13   all-else-equal footing for the analysis.

14   Q.   You have a control for partially

15   distant?

16   A.   Well, I have that as well, but, no, I

17   have a control in the regression for the number

18   of locally transmitted signals of each type,

19   Canadian, independent, network, et cetera. And

20   I do that and it's one of the things I discuss

21   in my testimony as a difference between what

22   was done in the -- in the past Waldfogel

23   analysis because local carriage of Canadian

24   distant signals for significantly viewed TV

25   stations affects the choice set.

1   So it affects the choice set for the

2   cable system. And so it's important to control

3   for it. So my adjustment to Dr. Israel's

4   regression and my adjustment to Dr. Crawford's

5   regression also added this control. It's not

6   as important as the program minutes, but it's

7   also in there.

8   Q.   And in this instance when -- well,

9   your regression doesn't take into any account

10   whether CBET, whether a given signal is local

11   or distant to a subscriber group, does it?

12   A.   Yes, it does.

13   Q.   Can you say in this instance with

14   respect to this system, Buckeye County system,

15   how much Buckeye County system values CBET?

16   Other than that it's --

17   A.   Ask that again?

18   Q.   -- at least an amount of the marginal

19   cost of carrying an additional DSE?

20   A.   So could you -- I'm sorry, could you

21   repeat the question?

22   Q.   In this instance, can you say how much

23   Buckeye County system values carrying CBET?

24   A.   I'm never trying to say how much the

25   value is in absolute dollar terms. Remember,

1   we're estimating willingness to pay and we need

2   to infer relative market value.

3   In -- in this system in the

4   regressions, we would enter an observation for

5   the system, the royalty payment for the system,

6   with the programming minutes capturing the

7   Canadian carriage on a distant basis, so over

8   93 percent of the market, so that would just

9   be .93 of a Canadian signal there, and then

10   there would be a control in the regression for

11   the number of locally carried Canadian stations

12   or educational -- and educational stations, et

13   cetera, and so our control would enter there

14   for Buckeye.

15   So that's -- that's what this

16   observation in the regression would look like.

17   Q.   None of the fee-based regressions,

18   yours or anybody else's, take the cost of

19   signal delivery or distance from the station

20   into account; is that right?

21   A.   So we're inferring -- we're inferring

22   from -- so there's not a -- there's not a

23   distance control, but we -- we know from some

24   of the history in this case that the distance

25   is a factor in the carriage choice, but it's

1   wrapped up in the decision to carry or not to

2   carry.

3   So it's through the revelation or the

4   revealed preference of do we carry this signal

5   here or there. The cable systems, we expect

6   them to be taking into consideration the

7   benefits and the costs. And so this is a net

8   value.

9   So we don't need to sort of put

10   anything explicit in there.

11   Q.   I'm just asking whether --

12   A.   Okay, sorry.

13   Q.   Whether the model controls for the

14   distance --

15   A.   I'm a professor; I talk a lot, so --

16   Q.   I'm a lawyer so I know what you mean.

17   (Laughter.)

18   BY MR. MacLEAN:

19   Q.   But I'm just asking you if the

20   model --

21   A.   Yeah. Okay.

22   Q.   -- controls for the distance or the

23   cost of signal delivery.

24   A.   So I think they're captured in the

25   cable system decision.

1   Q.   Well, they're captured in the sense

2   that one might expect, say, a system close to a

3   big city is more likely to carry big city

4   stations, right?

5   A.   I think we have some evidence of that,

6   yeah.

7   Q.   And a system that's in a more rural

8   area is more likely to carry stations from a

9   more rural area, right?

10   A.   That, I don't know. What we know --

11   Q.   There's a cost associated from

12   transmitting, from delivering a signal from a

13   big city into a rural area. You would expect

14   the rural area to retransmit a more nearby

15   signal, wouldn't you?

16   A.   So, actually -- so this part we have

17   -- we have empirical research on this. And

18   Dr. Waldfogel quoted it last time around, and

19   it speaks to my -- my literature as well, and

20   my research as well.

21   So cost might be a factor, but the

22   benefits are kind of -- seem to outweigh that

23   in the sense that if you're in a rural area,

24   you have a small number of local stations,

25   you're going to be more likely to import stuff

1   overall.

2   And so that's discussed in the

3   2004-2005 testimony. So -- so the costs are

4   just one piece of that choice.

5   Q.   Well, how is a -- how is a

6   non-super-station signal delivered over

7   distance?

8   A.   So, I mean, just these are carried

9   over the cable systems.

10   Q.   I understand. But how is it delivered

11   from the station to the cable system over a

12   long distance?

13   A.   Don't know the technical side of this.

14   I have an engineering background, but I'm not

15   going to venture down there.

16   Q.   Okay. The -- would you expect that

17   the cost of that delivery will increase over

18   distance?

19   A.   Yes, I would expect that.

20   Q.   And I believe we got testimony from

21   another witness here that something like

22   90 percent of all non-super-station distant

23   carriage is within 150 miles of the station.

24   Do you think cost could have a -- something to

25   do with that?

1   A.   My view is it's overwhelmingly demand,

2   but I -- I would say yes, cost can play a role.

3   Q.   And none of the systems -- or none of

4   the models, regression models, take that cost

5   into account?

6   A.   They do. They do. The choice -- the

7   choice is a net consideration. It's a net

8   consideration.

9   Q.   And if a system chooses not to carry a

10   signal because it's so far away the cost would

11   be prohibitive, that's a decision -- that's a

12   -- that's a decision that that goes into the --

13   fees?

14   A.   It's a cost versus benefit. It's that

15   the benefits of carrying the signal are -- it's

16   not worth the money, it's not worth the royalty

17   cost, and that's the incremental benefit minus

18   the incremental cost.

19   So you have to have both sides of the

20   equation.

21   Q.   Geographic differences in station

22   could account for variation in fees, right?

23   A.   Geographic differences, geographic

24   differences in stations? So geographic

25   coverage of them?

1   Q.   Possibly.

2   A.   Well, that -- that can affect demand.

3   So the location of the stations can affect

4   demand. So it would affect carriage choice.

5   Q.   Just as one example, inside or outside

6   the Canada zone, that's a geographic difference

7   between stations, right, or between systems,

8   right?

9   A.   So that's a geographic difference.

10   Q.   And so geographic differences in the

11   location of systems can -- can account for some

12   variations in fees and minutes, right?

13   A.   It can account for the choices. It

14   can account for the choices, but the choices

15   are still incremental benefits minus

16   incremental costs. And so that -- that's the

17   piece that somehow is missing in your -- in

18   your statement.

19   Q.   I think it's the piece that might be

20   missing in the regressions, but let's take a

21   look at your regression results at

22   Exhibit 4005, page 28.

23   A.   Page 28 of my --

24   Q.   Of your -- these are your baseline

25   regression results.

1   A.   Yes.

2   Q.   By the way, and this is on another

3   page of your testimony, but you -- in addition

4   to providing your regression results, you also

5   describe your sensitivity tests and provide

6   your inputs for the -- for those sensitivity

7   tests; is that correct?

8   A.   Yes. Yes, I do.

9   Q.   Thank you for doing that. I do want

10   to give you credit where credit is due. Would

11   you agree with me that that's very important to

12   provide that kind of information so that -- to

13   help ensure that your model isn't selected to

14   fit your expectations?

15   A.   Yeah, we want to present -- we want to

16   present some sensitivity, I think, is useful.

17   It's useful to do.

18   Q.   And would you agree it's not good

19   econometric practice to select your model based

20   on the expected results?

21   A.   That's right.

22   Q.   Okay. Back to your results here.

23   Let's look at your coefficients, Canadian

24   minutes. Remember, this is in thousands of

25   minutes, I understand, 88.88. What do those

1   two asterisks mean?

2   A.   So that means that the confidence

3   interval, it's -- this is statistically

4   significant at 99 percent level. So it's

5   estimated at reasonably precisely in this

6   specification.

7   Q.   Okay. So the number below, the 32.92,

8   that's your standard error, correct?

9   A.   That's correct.

10   Q.   Okay. So that actually does leave a

11   pretty wide confidence interval, even though it

12   is statistically significant and positive?

13   A.   Um-hum, um-hum.

14   Q.   Correct?

15   A.   Yes.

16   Q.   Okay. I mean, that -- that -- the

17   confidence interval is roughly a little bit

18   less than two times the standard error above

19   and below, correct?

20   A.   Yes.

21   Q.   Let's take a look down at your

22   coefficient for sports minutes, which is your

23   next coefficient down there.

24   A.   Yes.

25   Q.   Statistically insignificant, correct?

1   A.   That's correct. This one is -- the

2   confidence intervals are -- are really wide.

3   So we don't -- we don't spend too much time

4   interpreting that coefficient.

5   Q.   Okay. Well, you do interpret it when

6   you calculate shares, don't you?

7   A.   Yes, but I calculate the -- I'm

8   emphasizing the Canadian Claimant share here.

9   So --

10   Q.   Which is -- which is -- I mean, to

11   calculate a percentage based on the Canadian

12   Claimant share, you need the -- you need the --

13   the sports share in your calculation, don't

14   you?

15   A.   So we -- well, to do the shares, we

16   wind up having to use -- we do use all the

17   coefficients, yes. We do use all the

18   coefficients.

19   Q.   Even though in this particular

20   situation with the sports coefficient, you

21   can't even reject the null hypothesis?

22   A.   So that's -- that's right. I don't

23   reject -- the best point estimate is still the

24   coefficient, but I don't reject a null

25   hypothesis on this one.

1   Q.   And just to make it clear, what that

2   means is you can't reject the possibility that

3   there is no correlation between the number of

4   sports minutes and the amount of fees paid,

5   correct?

6   A.   So in this specification, I say that

7   the best estimate is in this range, and so zero

8   is -- so zero is in the confidence interval,

9   but I can't reject that it's -- I can't reject

10 that it's zero, but I also -- the best estimate

11 is still 906.

12   Q.   Isn't the first -- whenever you do a

13 statistical analysis, isn't the first step to

14 do a hypothesis test, see if you can reject the

15 null hypothesis?

16   A.   No, the first step to specify your

17 model. So the first step is to specify the

18 model to reflect the institutions. And then

19 you estimate it with the data.

20   And here we're aiming for the most

21 precise estimates that we can get for these

22 coefficients of interest, where the most

23 important coefficient of interest in this --

24 this context is the Canadian Claimant one.

25   And, you know, so we shouldn't -- we

1   don't like to interpret coefficients that are

2   statistically insignificant. And so we try to

3   avoid that. But in doing shares, if we take

4   the statistically significant one, the leftover

5   one is going to go give us our share.

6   So they are sort of incorporated in

7   the ultimate value calculations.

8   Q.   In all your published work, have you

9   ever published anything in any peer-review

10   publications in which you have used a

11   statistically insignificant result in order to

12   compute a conclusion?

13   A.   So, no, we don't interpret -- no, I do

14   not interpret a statistically insignificant

15   coefficient, but I have never calculated shares

16   before. So --

17   Q.   Okay. And here you calculated shares

18   using a statistically insignificant

19   coefficient. Is this something that you would

20   submit for publication?

21   A.   I would submit this for publication.

22   Q.   Even though you're using a

23   statistically insignificant --

24   A.   I -- I -- I would submit this for

25   peer-reviewed publication as the best estimate

1   of relative market value for Canadian Claimant

2   programming. I would absolutely do that.

3   Q.   Let's take a look at your coefficient

4   for Program Suppliers. And this actually

5   includes Program Suppliers and Devotional,

6   correct?

7   A.   Correct.

8   Q.   All right. Negative coefficient.

9   A.   So we have the table -- yes, so this

10   is the table -- the title is not adjusted

11   right.

12   Q.   Now, here this one is statistically

13   significant but barely, would you agree?

14   A.   Well, standard confidence interval,

15   5 percent. So --

16   Q.   The confidence interval here consumes

17   most of the negative value that you have?

18   A.   So, well, it's -- I'm not sure what

19   you mean by "most." It's a -- it's a

20   confidence interval at a kind of standard

21   95 percent confidence that we reject that it's

22   positive, so -- but it's not that precise. But

23   5 percent is -- 5 percent is confident enough

24   for me to be -- to be interpreting this

25   coefficient.

1   Q.   Let's take a look at your share

2 calculations in your amended direct. This is

3 Exhibit 4006, page 38.

4   A.   Table -- the Table 3?

5   Q.   Yes. For share calculations, you

6 basically used your coefficients as marginal

7 value, correct?

8   A.   I do.

9   Q.   And you do that even though the sports

10 coefficient here, as we've seen, is

11 statistically insignificant, correct?

12   A.   I do, I do.

13   Q.   Now, when you're calculating a share

14 you -- as I think you said on direct, you allow

15 the Program Suppliers' coefficient here to have

16 a negative value, so you end up with a negative

17 share, right?

18   A.   I do.

19   Q.   Which would mean that as to the

20 Canadian systems, assuming that you're not

21 going to require MPAA and SDC to contribute

22 some money here, you're ultimately distributing

23 more than 100 percent of the funds, right?

24   A.   So, no. No. So what this is saying

25 that the value of the Canadian Claimant

1   programming on these signals needs to be high

2   enough to compensate for duplicative

3   programming or programming that's not so valued

4   on these signals.

5   And so to take this back to the

6   decision context, if you're thinking about,

7   well, do I want to distribute, say, one of the

8   Canadian signals that has a more -- a larger

9   amount of non-Canadian content, you have to

10   say: Well, this is going to kind of maybe pull

11   my subscribers away from my other programming,

12   perhaps pull them away from some advertiser

13   funding. And so this reduces the value, but if

14   the Canadian Claimant value is high enough,

15   then you still do it.

16   And so that's -- that's really all it

17   is. And so these Joint Sports and Program

18   Suppliers minutes on Canadian Claimant signals

19   are, you know, kind of -- they're here to help

20   us distinguish the Canadian part. They're not

21   here for me to be thinking about, well, what's

22   the value of Joint Sports minutes so much on

23   these signals.

24   And so I don't view this negative

25   coefficient as really anything very surprising,

1   but I want to get a Canadian estimate, and

2   that's the right approach to take for that

3   coefficient.

4   Q.   Well -- but unless you're pulling

5   money in from somewhere else, you're -- your

6   estimate is going to add up to more than

7   100 percent without that negative share, right?

8   A.   But I have the negative share so it

9   adds to 100 percent.

10   Q.   You --

11   JUDGE STRICKLER: Excuse me, counsel.

12   Would you describe that negative number as an

13   opportunity cost figure as opposed to an actual

14   dollar cost?

15   THE WITNESS: So I do -- I do think of

16   it that way because, you know, where does this

17   come from? So duplicative programming or if

18   you have a viewer who's watching a

19   programming -- a program, a Program Suppliers'

20   program on a Canadian signal, what aren't they

21   doing?

22   And one of the things that they are

23   not doing is maybe watching an ad-supported

24   channel on the cable network. So that, I

25   think, is a very reasonable hypothesis for

1   where that comes from.

2   JUDGE STRICKLER: Thank you.

3   BY MR. MacLEAN:

4   Q.   Let's take a look at your confidence

5   interval at Exhibit 4005, that's your direct

6   statement, page 38.

7   A.   Page 38.

8   Q.   And I'm looking at the bottom

9   paragraph, which is the only place I was able

10   to find a confidence interval in your -- in

11   your -- calculated for in your share estimates.

12   A.   So, I'm sorry, so page 38 in 4005.

13   Okay. Okay.

14   Q.   This 2.8 to 8.8 confidence interval

15   for the Canadian share, how did you calculate

16   that?

17   A.   So I -- I added the -- I calculated a

18   bound on the regression coefficient, the lower

19   and the upper bound based on the standard

20   errors, and then I calculated the shares that

21   way.

22   Q.   Now, this confidence interval assumes

23   that your -- for example, your JSC share, point

24   estimate, was correct, right?

25   A.   So I -- in calculating this share, the

1   bounds are on the Canadian Claimant, right, so

2   I don't adjust the -- the other elements in the

3   share.

4   Q.   If you had used the -- if you had used

5   the confidence interval for the JSC

6   coefficient, then this share could have been

7   anywhere from a tiny, tiny fraction up to the

8   entire value of the Canadian stations; isn't

9   that right?

10   A.   Well, I could have calculated the

11   confidence interval versus -- on the JSC share,

12   but I -- I wasn't estimating -- I wasn't trying

13   to get the JSC share in Canadian Claimant

14   programming. So I think this is the -- like --

15   I took the 95 percent confidence interval and

16   the coefficient of interest, did the upper and

17   lower bound.

18   And so I think that's like -- that's

19   my confidence interval for this estimate. I

20   could have done other things, but in my

21   judgment, this is -- this is the right way to

22   do it.

23   Q.   Even though you're not using at all

24   the confidence interval on the JSC share?

25   A.   Yeah, right, I think this is -- this

1   is -- this is the approach I would take.

2   Q.   Let's take a look at your rebuttal

3   statement, Exhibit 4007, page 21, Table 4.

4   These are your adjustments to Dr. Israel's

5   regression. So --

6   A.   Sorry. Page -- Table 4. Just --

7   Q.   Page 21.

8   A.   Page -- I'm sorry, page what?

9   Q.   Page 21.

10   A.   Okay. Got it. Sorry.

11   Q.   These are your regression results for

12   your adjustments to Dr. Israel's regression,

13   correct?

14   A.   Correct.

15   Q.   And you adjusted the regression by

16   recategorizing programs in your CCG

17   classification and by including an interaction

18   between the categories minutes and a Canada

19   zone indicator, correct?

20   A.   That's what I -- yes, yes.

21   Q.   In essence, you've added sort of a

22   rough geographic control to Dr. Israel's

23   regressions, correct?

24   A.   Yeah, I -- I estimated the

25   coefficients inside and outside of the Canada

1   zone.

2   Q.   Now, in this -- in these regression

3   results, you haven't marked statistical

4   significance. Have you seen regression results

5   in which statistical significance isn't marked?

6   A.   Let's see. You're right, I did not

7   mark them.

8   Q.   But, in fact --

9   A.   But you can make -- so I did not -- I

10   did not mark them.

11   Q.   In fact, all of your coefficients for

12   program categories once you've added in this

13   geographic control, they all become

14   statistically insignificant except for Program

15   Suppliers and Canadians; is that right?

16   A.   So let's see. We can divide -- we can

17   look at the standard errors and -- so the

18   Canadian -- yeah, these results are -- are

19   imprecise. So the Canadian is -- remains

20   pretty statistically significant. So Program

21   Suppliers is statistically significant. The

22   others are -- the others are imprecise, yes.

23   Q.   Okay. So Sports is statistically

24   insignificant, correct?

25   A.   Yes, large standard errors.

1   Q.   Let's do it on the CCG classification

2   side, because --

3   A.   That's on the right side.

4   Q.   Yeah. Let's do it on the right side.

5   There we go, okay. Program Suppliers, that's

6   statistically significant, right?

7   A.   So, Program -- yes.

8   Q.   CTV, negative and statistically

9   insignificant, correct?

10   A.   Correct.

11   Q.   Public Television, statistically

12   insignificant, correct?

13   A.   Correct.

14   Q.   Canadian, that's statistically

15   significant, right?

16   A.   Right.

17   Q.   Okay. Of course, that's the one you

18   haven't included an indicator variable for,

19   correct?

20   A.   Yes. So I did not include asterisks

21   here. And --

22   Q.   And you didn't --

23   A.   I'm realizing that I didn't do that.

24   So --

25   Q.   And in the Canadian one, you didn't

1   include an indicator variable for in or out of

2   the Canadian zone, correct?

3   A.   Well, there is no estimate for

4   Canadian in and out of the zone. So that --

5   that coefficient won't estimate.

6   So you include the indicator but it's

7   -- there's no observations.

8   JUDGE STRICKLER: Why didn't you

9   include the notation for statistical

10   significance or insignificance here?

11   THE WITNESS: I didn't -- I'm not sure

12   why I didn't put them in this table. I think

13   this is an omission. I should really have the

14   asterisks. We can -- we can calculate them

15   from the stars, but, yeah, it's an omission

16   that it would have been better to put them in

17   the table, the stars.

18   JUDGE STRICKLER: Was it an

19   intentional omission or unintentional?

20   THE WITNESS: No, I'm looking at it

21   right now and I am sort of surprised that it's

22   not there.

23   JUDGE STRICKLER: Thank you.

24   BY MR. MacLEAN:

25   Q.   Then finally, Devotional,

1   significantly insignificant, correct?

2   A.   Correct.

3   Q.   Okay. One interpretation of these

4   coefficients could be that in the entire Canada

5   zone, only Program Suppliers and Canadian are

6   entitled to any share; isn't that right?

7   A.   No, I wouldn't make -- so -- so we

8   can't make a leap from statistical

9   insignificance to zero. That's -- that's

10 something that has come up in the rebuttal,

11 that our best point estimates, as imprecise as

12 they may be, are the estimated coefficients.

13   Q.   Okay, well --

14   A.   So -- so zero is not a better number

15 than the numbers here.

16   Q.   Let's take a look at the bottom, the

17 bottom of the page --

18   A.   Yes.

19   Q.   -- Devotional category outside of the

20 Canada zone. And I believe Chief Judge Barnett

21 asked you a question about why you -- why the

22 Devotional share was zero. What's that

23 coefficient for Devotional outside the Canada

24 zone?

25   A.   It's negative.

1   Q.   Okay. So you did -- with respect to

2 Devotional, anyway, you did reset negative to

3 zero when you did your share calculation,

4 didn't you?

5   A.   No. So I'm not sure -- so -- so no.

6   Q.   Do you remember this question from

7 Chief Judge Barnett?

8   A.   So, yes. So she asked about why I had

9 a zero estimate, but that was -- those were

10 reporting estimated coefficients.

11   I have not in any circumstances

12 replaced a negative coefficient with a zero.

13 And if I had done that, I have done it in

14 error, but I don't think I have done it.

15   Q.   Well here you have a negative

16 coefficient for Devotional outside the Canadian

17 zone, right?

18   A.   Right.

19   Q.   Okay. So now let's look at your share

20 calculations for your adjustment to

21 Dr. Israel's regression. Let me see -- all

22 right, page 22.

23   A.   Um-hum.

24   Q.   Table 5.

25   A.   So this is what we were talking about

1   before. And I think that it's just the -- this

2   is just that the amount of programming is so

3   low that we're -- we're just not in the

4   decimals here.

5   Q.   The amount of programming in the

6   Devotional category outside the Canada zone?

7   A.   I think so. So -- I mean, I have the

8   programs that we supply for this. And so I

9   didn't replace any coefficients with zero. I

10   multiplied by minutes. And I'm using, in the

11   left-hand column, the JSC data. In the

12   right-hand column, I'm using -- I'm using my

13   replacement.

14   But these should all be the

15   coefficient times the -- times the outcome.

16   Q.   Well, with respect to Devotional, a

17   negative coefficient should have led to a

18   negative share --

19   A.   A negative -- yes.

20   Q.   -- under what you're describing?

21   A.   A negative share. So -- so I should

22   report a negative share, if that's it, unless I

23   -- you know, again, I'm working with the JSC

24   programs here, but still I -- then it should be

25   less than zero. Again, I think this is

1   rounding. My answer before is that I really

2   think this is rounding.

3   Q.   Which would imply there's almost no

4   Devotional content outside the Canada zone?

5   A.   So -- well, it would imply that the

6   number of minutes times that coefficient was --

7   was low.

8   JUDGE STRICKLER: You have the same

9   problem, don't you, that counsel is asking you

10   about with regard to inside the Canada zone for

11   Commercial TV, don't you, comparing Tables 4

12   and 5? Where you have negative numbers with

13   regard -- on Table 4 and then they're listed as

14   zero on Table 5?

15   THE WITNESS: So --

16   JUDGE STRICKLER: Am I right, it's the

17   same issue?

18   THE WITNESS: It is the same -- it is

19   the same -- the same issue.

20   JUDGE STRICKLER: How do you explain

21   the difference between the negative number on

22   Table 4 and the zero on Table 5 as it relates

23   to Commercial TV?

24   THE WITNESS: So it's my -- it is my

25   intent here to keep the negative coefficients

1   and multiply them by the programming minutes

2   and adjust the shares that -- that way.

3   And so I have to say looking at this

4   without having my sort of programs at hand,

5   either I -- these are below -- they're below

6   the rounding, they're below the rounding

7   levels, or in doing these share estimates from

8   the JSC programs that they were, in fact,

9   replaced by a zero.

10   But replacing by a zero is -- is not

11   the right -- is not the right answer. So I

12   would say that that's still not -- that's not

13   the right approach.

14   BY MR. MacLEAN:

15   Q.   I now want to move to a couple of your

16   criticisms about Dr. Erdem's sensitivity tests.

17   So could we take a look at your rebuttal,

18   Exhibit 4007, at page 37.

19   And I want to focus on the very end of

20   this page starting at "distant subscribers,

21   however," where you're addressing Dr. Erdem's

22   use of distant subscribers. Okay?

23   A.   Okay, right.

24   Q.   You say -- so Dr. Erdem included a

25   variable for distant subscribers as a

1   sensitivity test. You said, "Distant

2   subscribers, however, is an outcome of

3   advertise distant signal carriage decisions,

4   not an independent variable. In other words,

5   the number of distant subscribers is

6   functionally related to the total number of

7   subscribers, the mix of distant signals carried

8   and the cable system's choice of where to

9   distribute those signals."

10   Do you see that?

11   A.   Yes.

12   Q.   Okay. What do you mean by an outcome?

13   A.   So a cable system decides to

14   distribute a signal in a portion of its market.

15   So in the data, in the type -- in the

16   system-level data that Mark Israel uses and

17   that I use, the minutes is -- the minutes that

18   we get is this distant signal in half the

19   market times the minutes in the various

20   categories.

21   But distant subscribers -- and so

22   distant subscribers is built -- is built into

23   that. And so if we add it again as sort of

24   another variable here, now part of the value of

25   the programming minutes is being picked up in

1   the distant signal -- in the distant signal

2   coefficient. And so we can't interpret our

3   programming minute coefficients anymore in the

4   way that we want to.

5   Dr. Crawford rebuts this and he uses

6   the words of like "double counting." And so

7   there's an aspect of double counting, I think,

8   but for me, it -- I see it more as we lose our

9   interpretation of the coefficients that we want

10   to interpret.

11   Q.   Because distant subscribers is

12   effectively correlated with the number of

13   distant signals?

14   A.   Functionally related to them.

15   Q.   Functionally related to the number of

16   distant signals?

17   A.   Yes.

18   Q.   Number of distant signals would be an

19   outcome variable in this sense, right?

20   A.   Number of distant --

21   Q.   Signals.

22   A.   The number of distant -- the number of

23   distant signals is -- is the choice variable.

24   So the distant subscribers is a function of

25   that choice to carry the signal here.

1   Q.   Right. So including, for example, a

2 variable of number of distant signals, that

3 would be another example of an outcome variable

4 that you wouldn't use as a control, correct?

5   A.   So that's really -- that's not

6 something I would use as a control in my -- in

7 my specification. I know that -- well, so I

8 wouldn't use that in my specification.

9   Q.   And, in fact, you don't use it in your

10 specification?

11   A.   I don't use it in my specification.

12   Q.   Right. Dr. Crawford does use a

13 control variable for a number of distant

14 signals, correct?

15   A.   He does.

16   Q.   Have you thought about how that

17 control variable affects the econometric

18 interpretation of his variables of interest?

19   A.   Yes, I thought about this. And he

20 discusses it at -- at some length. And so, you

21 know, I didn't write Dr. Crawford's analysis,

22 but in controlling for at the subscriber group

23 level the number of distant signals, he's

24 estimating how changes in programming minutes

25 affect the outcome, affect payments and values,

1   holding the total bundle of minutes constant.

2   And so there's an interpretive aspect

3   here where you could think about -- you could

4   think about adding some minutes, but everybody

5   gets 24 hours in a day. And so adding

6   programming minutes without kind of keeping a

7   cap gives a different interpretation than if

8   you say: Let's add some programming minutes

9   and take other things -- take other things

10   away. And so his is trying to prevent this

11   issue of somebody gets more than 24 hours in a

12   day.

13   Q.   Now, I -- we went through a lot of

14   this with Dr. Crawford.

15   A.   I'm sure.

16   Q.   During his testimony. And so I don't

17   want to repeat all of that. But would you

18   agree with me that Dr. Crawford's

19   interpretation would be what's the change in

20   fees or log of fees, the way he does it, by

21   adding minutes while taking away network

22   minutes? Would you like some Purell?

23   A.   Do I need some?

24   Q.   I just -- I didn't want to use it

25   without offering.

1   A.   No, I think I'm good. Thanks.

2   JUDGE STRICKLER: Do you have enough

3   for everybody?

4   (Laughter.)

5   MR. MacLEAN: I guarantee we do.

6   Right? We do.

7   THE WITNESS: So that's -- that's my

8   understanding of his interpretation, that it's

9   -- it's you want to think about adding minutes,

10   taking away this -- yes, he uses network

11   minutes in his example. So I think that's the

12   correct interpretation.

13   BY MR. MacLEAN:

14   Q.   But he doesn't calculate a marginal

15   value of network minutes to do that subtraction

16   -- or do that addition, does he?

17   A.   So I think at this point you're like

18   into the grass of Dr. Crawford's model. I'm

19   not really comfortable saying yes or no to that

20   without going and reading it.

21   Q.   I don't want to cover it if you

22   haven't given it some thought.

23   A.   Yeah.

24   Q.   Okay.

25   MR. MacLEAN: Thank you. No further

1   questions.

2   CROSS-EXAMINATION

3   BY MS. PLOVNICK:

4   Q.   Good afternoon, Dr. George.   I am Lucy

5   Plovnick.   I represent Program Suppliers.   How

6   are you?

7   A.   Hi.

8   Q.   So, Dr. George, earlier today you said

9   you're not a fan of surveys.   And can you

10   explain why you're not a fan of surveys?

11   A.   So I'm an economist.   And whenever we

12   have market data available to us for inference,

13   that's what we use.   And surveys have some

14   places in the world where it's hard to get

15   market data, but I -- well, I chose to do an

16   analysis based on the market -- the behavior of

17   cable systems in the marketplace because that's

18   what I think is the right -- the right

19   approach.

20   Q.   So you think that analysis that

21   involves some observation of market data is

22   better than an attitudinal survey?

23   A.   I do, I do.

24   Q.   All right.   So, Dr. George, in your

25   direct testimony, which was Exhibit 4005, you

1   said that you developed your approach to

2   calculating relative market value based on your

3   understanding of the hypothetical market that

4   Dr. Crawford described in his testimony in the

5   2004 through 2005 cable proceeding; is that

6   correct?

7   A.   I thought that was well done. I have

8   some independent views on that, but I -- I do

9   think that that was a good analysis.

10   Q.   So do you know if Dr. Crawford ever

11   worked as a cable operator?

12   A.   I don't think Dr. Crawford ever worked

13   as a cable operator.

14   Q.   Have you ever worked as a cable

15   operator?

16   A.   I have not worked as a cable operator.

17   Q.   All right. So I want to talk about

18   that hypothetical market, but before I get

19   there, let's talk about the regulated market

20   that -- under the statutory license, so we can

21   all make sure we understand that.

22   So in the current regulated market

23   under the statutory license, a copyright owner

24   with a program that wants to license it to a

25   broadcast station would approach the broadcast

1   station and work out a license in the local

2   market to carry the station. Is that correct?

3   A.   I believe so, yes.

4   Q.   And that transaction would be informed

5   by Nielsen ratings; is that correct?

6   A.   Nielsen ratings would probably play a

7   role in the -- in the local market.

8   Q.   All right. So then in the -- in this

9   regulated market, if a cable operator then

10   wants to retransmit that broadcast station, in

11   the local market they would need to either --

12   it would either be must carry or they would

13   need to have a retransmission consent

14   negotiation with the broadcaster to have the

15   ability to retransmit that station on the cable

16   system; is that correct?

17   A.   I think so, yes. I think I followed

18   all that.

19   Q.   And then in this regulated market, if

20   a cable operator wants to retransmit a

21   broadcast signal to a distant market that would

22   be covered by Section 111, then they would not

23   have to then do a further negotiation to do

24   that retransmission; they would just do it

25   subject to the Copyright Act; is that correct?

1   A.   It's a compulsory license, yes.

2   Q.   To the compulsory license. And so the

3   fee that the cable operator would pay for that

4   further exploitation of the work would be the

5   Section 111 royalty fees that would be paid to

6   the Copyright Office; is that correct?

7   A.   Depending on how much of the -- how

8   many subscriber groups or the share of the

9   market, but it would be according to that

10   formula, if they chose to redistribute it.

11   Q.   But it would be paid to the Copyright

12   Office. It would not be paid to the copyright

13   owner directly, correct?

14   A.   Oh, correct. Correct.

15   Q.   And it would not be paid to the

16   broadcaster. It would be paid to the Copyright

17   Office?

18   A.   That's my understanding of the -- of

19   the process.

20   Q.   Right. So then if a copyright owner

21   wants to then get royalties from that distant

22   retransmission by the cable system, they then

23   have to participate in a proceeding like this

24   in order to get a share of royalties from the

25   Copyright Royalty Judges, an allocation share;

1   is that correct?

2   A.   This is my understanding of the -- of

3   the basic process.

4   Q.   Right. So in the regulated market if

5   you're a copyright owner, there are basically

6   two opportunities. If I have a work and I want

7   to seek royalties for the use of my work, if I

8   own a program, I can license it to a

9   broadcaster in the local market and I could --

10   would get a fee for that. And then if it's

11   further exploited outside of the local market

12   by a cable operator, I would come to a

13   proceeding like this to get a royalty for the

14   further exploitation for that distant

15   retransmission.

16   Those are two revenue streams; is that

17   correct?

18   A.   Yes.

19   Q.   And that's available in the regulated

20   market right now?

21   A.   The compulsory license in the

22   regulated market, yes.

23   Q.   Right. And I'm considering -- the

24   regulated market and the compulsory license are

25   kind of synonymous the way I'm talking about

1   it.

2   A.   Okay.

3   Q.   Do we agree that 111 is a -- creates a

4   regulated market? If you agree to that?

5   A.   Yes.

6   Q.   All right. So another feature of the

7   regulated market is a cable system operator is

8   not permitted to insert advertising in a

9   distant signal, correct?

10   A.   That's my understanding, yes.

11   Q.   That's pursuant to the regulations?

12   A.   Yes.

13   Q.   It's a control. Okay.

14   So now let's turn to the hypothetical

15   market. So no more statutory license. That's

16   gone. And there's also no prohibition on

17   inserting advertising in distant signals

18   either, because that's gone.

19   All right. And so now I'm a copyright

20   owner. If I have a program I want to license

21   under broadcast signal, I want to get

22   compensation for licensing to the broadcaster,

23   but I also want to make sure that I'm going to

24   get compensation for any further exploitation

25   of my work in any distant market that may

1   happen.

2   So what do I do? How do I -- how do I

3   ensure that I get my compensation? How would

4   that transaction look?

5   JUDGE STRICKLER: In the hypothetical

6   market?

7   MS. PLOVNICK: In my hypothetical

8   unregulated market.

9   THE WITNESS: So my view of the

10 hypothetical unregulated market, so you take

11 away the compulsory license, and the most

12 important thing that happens is bargaining over

13 prices.

14   I'm rather convinced by some of the

15 institutional stuff that I've read that it's --

16 it's -- it's not so -- it wouldn't be likely

17 that the cable systems would negotiate on too

18 many different fronts with individuals, with

19 individual owners, and that they would focus on

20 the signals.

21   Now, I think, yes, it's plausible that

22 they would put advertising on these signals,

23 but I think that the value would remain based

24 on the differentiated content, this higher,

25 special -- higher willingness to pay view.

1   So that I don't think that would

2   really change the relative market value over

3   what we see now, but I could imagine that,

4   yeah, it's plausible to say there were ads, but

5   I think that these bundles of signals, there --

6   as an economist, we are kind of good at looking

7   at, well, what's the counterfactual? What

8   could happen? What would people be doing

9   otherwise?

10   And if there was a really big value

11   for some type of content, they could go be

12   bargaining for it now. And so that's why I

13   think that the price -- the price change and

14   the negotiations over prices is probably what

15   we would see. So that's my conception of this

16   alternative market that we -- we work from in

17   these analyses.

18   BY MS. PLOVNICK:

19   Q.   So in the -- in the first transaction,

20   so say I'm a copyright owner, I have a program,

21   and I'm trying to now, in this hypothetical

22   unregulated market, license my work for

23   carriage on a broadcast station, so I approach

24   the broadcaster and I work out a license for

25   carriage.

1   At the time that I did that, because

2   now we're not in the regulated market anymore,

3   would I also negotiate with the broadcaster the

4   ability for them to license my work in distant

5   markets? Would that be part of the same

6   transaction?

7   A.   I guess it could be.

8   Q.   And so --

9   A.   Yeah, could be or could not be.

10   Q.   If it were, then I would need to

11   figure out in the course of that initial

12   transaction the value of my program, right? I

13   would have to negotiate with the broadcaster

14   for the value of the distant retransmission of

15   my work in addition to the local transmission

16   of my work?

17   A.   And -- and in doing so, you would, I

18   think, make some of the same arguments that we

19   make here, that this is differentiated

20   programming, it appeals to special people, can

21   increase the -- increase viewers or raise

22   prices.

23   Q.   Right.

24   A.   And so I think in making that

25   argument, we're kind of still in the same

1   relative market value framework that we're

2   evaluating right now.

3   Q.   In the negotiation between the

4   copyright owner and the broadcaster?

5   A.   I think so, yeah.

6   Q.   So it would be a framework where we

7   would consider things like viewing in order to

8   determine the value?

9   A.   So I don't think viewing would ever

10 play much of a role for distant signal

11 valuing -- valuations.

12   Q.   Even though we're negotiating all of

13 this at the same time, both the local section

14 and the --

15   A.   But they're two different things. So

16 local carriage is really about -- I mean,

17 viewing is very important in the local market,

18 but in the subscriber-driven cable systems,

19 this negative correlation -- I'm trying not to

20 use jargon -- but the distinctiveness of

21 programming in attracting people who otherwise

22 might not be watching is more important. And

23 so I think that would become the selling point.

24   JUDGE STRICKLER: But remember, in

25 counsel's hypothetical, there would be

1 advertising replacement as well, given the fact

2 that in the hypothetical market, at least, as

3 she posits it, there would be -- there would be

4 advertising replacement.

5   Does that, all other things being

6 equal, make viewership relatively more

7 important?

8   THE WITNESS: So -- and I guess I

9 don't think so. And the reason I say this is

10 because advertising in the local market, this

11 -- this -- who the advertisements see, large

12 number of people, that is relevant for

13 broadcasting in a local market.

14   But as soon as you start to talk about

15 distant transmission, then these distant

16 signals, their appeal, and I think there's just

17 good evidence that their appeal is for the

18 special user, the differentiated content, who

19 brings other people in.

20   And I think if advertisers want to be

21 on the programs broadcast on a distant basis,

22 there are going to be advertisers that care

23 about that. Like the sports fan who really

24 wants that -- that distant signal sports

25 programmer, who really wants to keep up with

1   the Canadian news.

2   And so that same value that comes from

3   higher prices in the cable market or attracting

4   and retaining subscribers is going to be what

5   appeals to the advertisers too. And so the

6   relative market value I don't think would

7   really change, if we -- if we had

8   advertisements on distant -- if we had

9   advertisements on distant signals.

10   I don't think viewing would become any

11   more important. It would remain the same --

12   the same intensity and preferences. So, you

13   know, this is -- we're kind of getting a little

14   bit -- we can say a lot of things about that

15   hypothetical market, but I don't think that

16   advertising on these signals would change the

17   relative market value, change demand.

18   BY MS. PLOVNICK:

19   Q.   So in my hypothetical then, this is a

20   transaction between the copyright owner and the

21   broadcaster where we're considering both the

22   licensing in the local market and further

23   exploitation in a distant market at the same

24   time.

25   So I'm just trying to understand how

1   this would work because, you know, we are

2   sitting here in a negotiation that is very

3   focused on, as you said, viewing ratings and

4   advertising. And now you're saying that the

5   ability to advertise in the distant market,

6   that it wouldn't change, it wouldn't change the

7   negotiation between the copyright owner and the

8   broadcaster?

9   A.   I don't think it would change the

10   relative market value of programming, is what

11   I'm saying. So, I mean, how the negotiations

12   go down, so there's two dimensions. There's

13   the local market and there's the distant part.

14   I mean, that -- that doesn't seem that

15   it's that hard. And so in one part, you

16   advertise based on we're going to attract this

17   many viewers in the local market and the other

18   is we're going to --

19   Q.   Attract this many as in the distant

20   market?

21   A.   We're going to go and -- well, no,

22   we're going to get these types of people.

23   JUDGE STRICKLER: Well, Professor,

24   that was -- that leads to my question that I

25   was about to ask you. It sounds as though

1   you're saying that when a local station is

2   distantly retransmitted, as we're looking at in

3   this proceeding, that we're looking at what's

4   considered niche programming, so that there's

5   value in getting a few more, relatively

6   speaking, subscribers, but that doesn't have a

7   mass component to it that would generate

8   advertising revenue.

9   It's more likely to generate

10   subscription -- increased subscription or

11   retained subscription, rather than enough

12   eyeballs, if you will, to make advertising

13   itself worthwhile.

14   THE WITNESS: I think that that's a --

15   that's a much clearer statement than I made in

16   my sort of slow, wavering approach. But I --

17   JUDGE STRICKLER: I thought I was

18   actually saying what you did.

19   THE WITNESS: So, no, I think it was.

20   So I will adopt that. But the one piece that

21   I'm trying to convey here is advertisers don't

22   necessarily just care about numbers. And so

23   they care about viewing.

24   And I've worked with some advertising

25   data in the past, and I know that what distant

1   signal -- distant signal viewing is very low,

2   so if you're going to have -- you're going to

3   try to find advertisers who want to be on these

4   distant signals, they're probably going to care

5   about that niche stuff just the same way that

6   the cable systems care about the niche viewers

7   with the engaged preferences.

8   And so I think if you put advertising

9   on distant signals, it really wouldn't change

10   the relative market value of programming

11   because there would be the same differentiated

12   stuff that has higher value. The stuff that

13   you can see anywhere will have lower value.

14   And so I -- I just don't think that

15   this hypothetical market scenario changes what

16   we're talking about here.

17   BY MS. PLOVNICK:

18   Q.   Value to the copyright owner or to the

19   broadcaster when we're talking about --

20   A.   I'm going to -- so the relative market

21   value of the programming categories. That's

22   what I can speak to.

23   Q.   Well, my hypothetical was about a

24   program that was being licensed.

25   A.   Well, so these -- to the extent that

1   you can put programs in these bundles of

2   claimants like we're doing here, I think that I

3   don't think things would change.

4   I guess I don't want to go beyond

5   these categories, but these categories, they

6   still exist. That's what we're talking about?

7   Q.   These are categories of programs,

8   correct?

9   A.   Right, right.

10   Q.   Let's move on just a bit here. If

11   you'll -- looking at page 7 of your direct

12   testimony, which is Exhibit 4005, if you look

13   on page 7, in the first bullet point there.

14   You have a sentence that starts -- if you're

15   there with me. I want to make sure you're

16   there.

17   A.   The first bullet?

18   Q.   Yes --

19   A.   Hold on. So we are in --

20   Q.   You should be in Exhibit 4005, page 7.

21   A.   Okay. I've got. I'm sorry, I have

22   it.

23   Q.   So if you come down a few sentences

24   there, you have a sentence that says, "While

25   the majority of cable system revenues derive

1 from subscriptions, advertising revenue from

2 national cable networks is substantial and

3 increasing." And then the next sentence:

4 "Distant signals that attract viewers away from

5 programming with local cable advertising thus

6 do impose costs on cable systems by reducing

7 advertising revenue."

8   And you have a footnote 5, and in

9 footnote 5, you cite two sources, right, one --

10 if you're looking down there, one is a form

11 10-K submission to the SEC by Comcast

12 Corporation for 2013, and the second is an

13 industry survey sponsored by the Interactive

14 Advertising Bureau?

15   A.   Correct, yes. I know these.

16   Q.   Do you remember these? Okay. So if

17 you now look in the green binder, which I hope

18 you have one -- and if you don't, I will give

19 you one -- at Exhibit 6050 and 6051.

20   A.   So what's the binder called?

21   Q.   It should look like this (indicating).

22 Do you see it there?

23   A.   Program Suppliers Allocation Hearing

24 Cross-examination Exhibit Binder?

25   Q.   You've got it.

1   A.   Okay.

2   Q.   And please turn to Exhibits 6050 and

3   6051. And those should be those two documents

4   that you described in footnote 5.

5   A.   Yeah.

6   Q.   Please take a look and see if that is

7   correct.

8   A.   Comcast 10-K and then the -- yeah,

9   okay.

10   Q.   And, Dr. George, these are documents

11   that you produced to us in discovery as you can

12   see by the Bates stamp numbers in the bottom

13   corner.

14   A.   Right. What's the page for the IAB

15   report?

16   Q.   It should be Exhibit 6051. So if you

17   flip to the next tab.

18   A.   Oh, okay.

19   Q.   Okay. So these are the documents you

20   relied on in footnote 5 of your direct

21   testimony?

22   A.   Yes.

23   MS. PLOVNICK: I would move to admit

24   6050 and 6051.

25   MR. COSENTINO: No objection.

1   JUDGE BARNETT: 6050 and 6051 are

2   admitted.

3   (Exhibit Numbers 6050 and 6051 were

4   marked and received into evidence.)

5   MS. PLOVNICK: All right, thank you.

6   BY MS. PLOVNICK:

7   Q.   Okay. So before we turn to these

8   exhibits, I want to quickly turn back to page 6

9   of your written direct testimony, which is

10   4005. And I want to look at the bullet on the

11   bottom of the page there, and you say here,

12   "Distant signal carriage has little to no

13   impact on the programming decisions of

14   broadcast stations, and cable systems make

15   carriage decisions taking the programming on

16   distant signals as a given. As a result,

17   analysis of the relative market value of

18   distant signal programming need not consider

19   the supply side of the market and can focus on

20   the demand-side carriage decisions of the cable

21   systems."

22   A.   I think that's correct, yes.

23   Q.   And so this is your conception of the

24   market that you're relying on in your analysis?

25   A.   Yes, yes.

1   Q.   Okay. So now let's turn to

2   Exhibit 6050, which is the 2013 form 10-K for

3   Comcast. And turn to page 19.

4   JUDGE STRICKLER: Page number 19 of

5   the exhibit or the Bates number?

6   BY MS. PLOVNICK:

7   Q.   It's page 19 of the exhibit, and it's

8   Bates Number CGC-5-00047.

9   A.   Wait, so -- 00047? The table of

10 contents, okay.

11   Q.   Yeah. It might be faster to use the

12 Bates stamp number just because that's at the

13 bottom of the page.

14   A.   Okay.

15   Q.   But the page number of the exhibit is

16 19.

17   JUDGE STRICKLER: All those zeros,

18 it's much faster.

19   MS. PLOVNICK: I'm sorry. It's

20 CCG-5-000047.

21   JUDGE STRICKLER: Got it.

22 BY MS. PLOVNICK:

23   Q.   Okay. So tell me when you're there.

24   A.   I'm there.

25   Q.   Okay. So the paragraph at the bottom

1   of page 19 or Bates stamp page number 47, just

2   to get there quickly, that's about copyright

3   regulation; is that correct?

4   A.   Yes.

5   Q.   All right. And so if we look at -- so

6   in this paragraph, Comcast is talking about --

7   and then they talk about the Section 111

8   royalties that Comcast has to pay under --

9   pursuant to the statutory license. They also

10   talk about STELA; that's correct?

11   And if you look at the last sentence

12   of that page going over onto the next page,

13   they talk about some reports that were required

14   by STELA that the Copyright Office, the GAO,

15   and the FCC had to submit to Congress that

16   generally supported an eventual phaseout of the

17   compulsory licenses, although they acknowledge

18   the potential adverse impact on -- let's see.

19   I've got a hole there in mine, but is the --

20   A.   Cable and satellite subscribers.

21   Q.   And the absence of any clear

22   marketplace alternative to compulsory licenses.

23   But then Comcast says, in this last sentence

24   here going over onto page 20, "If adopted, a

25   phaseout" -- this is meaning a phaseout of the

1   statutory license plan -- "could adversely

2   affect our ability to obtain broadcast station

3   programming and substantially increase our

4   programming costs."

5   Do you see that?

6   A.   Um-hum.

7   Q.   So --

8   JUDGE BARNETT: I'm sorry, Dr. George.

9   Could you be careful to answer yes or no.

10   THE WITNESS: Yes. I apologize. I'm

11   so sorry.

12   JUDGE BARNETT: Thank you.

13   BY MS. PLOVNICK:

14   Q.   So Comcast believes that a phaseout of

15   the statutory license could adversely affect

16   their ability to obtain broadcast·station

17   programming and substantially increase their

18   programming costs?

19   MR. LAANE: Objection, Your Honor,

20   calls for speculation about what's in a third

21   party's mind.

22   JUDGE BARNETT: What's your question?

23   MS. PLOVNICK: I'm just asking her if

24   Comcast made this representation. I think I

25   used the word "think," but I can rephrase.

1   JUDGE BARNETT: It's there in writing.

2   I think that question might be a little bit

3   redundant. Can you go to your next question?

4   MS. PLOVNICK: I can, yes. Yes, Your

5   Honor.

6   BY MS. PLOVNICK:

7   Q.   So based on reading the statement,

8   Comcast seems to think that if the statutory

9   license -- or seems to -- I guess -- I don't

10   want you to speculate, but because I see

11   Mr. Laane standing up, but --

12   JUDGE BARNETT: Sustained. She can't

13   say what Comcast thinks.

14   MS. PLOVNICK: No, she can't say what

15   Comcast thinks.

16   BY MS. PLOVNICK:

17   Q.   But Comcast says that, if adopted, a

18   phaseout of the statutory license could

19   adversely affect Comcast's ability to obtain

20   broadcast station programming and substantially

21   increase their programming costs. Is that

22   correct?

23   A.   That's what it says.

24   Q.   Is that consistent with supply being

25   fixed, supply of broadcast station programming?

1   A.   Well, I would say it's consistent with

2   distant -- with the signals being a composite

3   bundle, that cable systems would then have to

4   negotiate for in some way. So -- so, yes, I

5   think it's consistent with the fixed supply.

6   Q.   So the fact that their ability to

7   obtain broadcast stations could be adversely

8   affected and their costs would go up, that

9   means that the amount of broadcast station

10   programming is fixed, that's consistent?

11   A.   I think the -- that if we took away

12   the compulsory license, the primary effect

13   would be this bargaining over prices for

14   distant signal carriage. And so it would

15   affect cost -- actually, I think that the

16   compulsory license fees are very high. I mean,

17   we have lots and lots of evidence that they're

18   very high.

19   And so in some ways I think that we

20   might see them -- we might see them fall,

21   but --

22   JUDGE STRICKLER: Excuse me,

23   Professor. In the hypothetical market, why

24   would the negotiations be between the signal

25   and the system rather than the individual

1   program owner, the copyright owner?

2   THE WITNESS: I think this is just a

3   transaction cost kind of argument, that these

4   signals are put together with the primary

5   interest of the local market in mind.

6   And so if they wanted to get

7   particular content in a certain way, they could

8   be bargaining for that now. And so I think the

9   distant signals are something -- something

10   special and cohesive. Again, you know, we're

11   pushing out into -- this hypothetical market

12   could be a lot of things. We could get rid of

13   the Canadian retransmission prohibition. I

14   mean, lots of things could happen.

15   But, you know -- so I think that the

16   market would really remain for these signals.

17   JUDGE STRICKLER: I thought lurking in

18   your answer would be, when I asked the

19   question, the transaction cost argument because

20   that's what it seemed like was the basis. So

21   I'm not surprised to hear you say that the

22   transaction cost would -- perhaps might make

23   copyright owner and cable system direct

24   negotiations, transaction cost prohibitive.

25   But so in a sense what you -- and

1   correct me if you disagree -- what you're

2   saying is that there's sort of a collective

3   efficiency here, that the local station that's

4   being distantly retransmitted sort of serves

5   the function of a collective. It has already

6   collected and aggregated all of these programs,

7   and now can negotiate in this hypothetical

8   market the bundle, just the way ASCAP could in

9   the music business or any other collective

10 could do it. Is that the point, that there's a

11 collectivized efficiency that minimizes

12 transaction costs?

13   THE WITNESS: I would say yes. Again,

14 that's like a very nice way of saying it, that

15 these signals put together content that's

16 linked to each other. So you take a New York

17 City signal into your market, maybe it has some

18 -- it has some news and some other programs

19 that are tailored to a New York audience. And

20 so they stay together in that way. They're

21 linked, and so -- and breaking them apart, you

22 know, can lower the value of the whole. So --

23   JUDGE STRICKLER: Well, I asked that

24 question because as there's a follow-up

25 question that relates to that. Once you have a

1   collectivized situation, you also have the

2   incentive for those things that are more

3   valuable, those items, those copyrighted

4   programs or musical compositions or what have

5   you that are more valuable, to opt out, so you

6   have -- you have not fractionalized licensing,

7   but you have -- you have those who decline to

8   be part of the collective.

9   And it seemed as though counsel's

10   questions were going to the point of, well, in

11   a hypothetical market, if I owned a copyright,

12   copyrighted program, that I thought could

13   negotiate on its own because it was

14   sufficiently valuable, say reruns -- syndicated

15   reruns of Friends or Seinfeld or something

16   that's considered very popular, I don't want to

17   be -- I don't want to be part of that

18   collectivized club because I can negotiate on

19   my own and I don't mind the transaction cost

20   because I've got a popular show that might

21   drive some subscriptions and maybe a cable

22   system, because we're often -- it's sort of a

23   frolic here at this point because we're in a

24   hypothetical market. We're trying to figure

25   out what it would look like, and we don't

1   really know. But a cable system might want to

2   create its own all-star syndicated lineup by

3   picking from a whole bunch of distantly

4   retransmitted stations and put together the

5   best of the best, so you don't have to just get

6   this station from Chicago and WPIX from New

7   York and all other; they'll create their own

8   station to maximize benefit.

9   Now, there may or may not be a

10   transaction cost problem there, but how do we

11   even know?

12   THE WITNESS: So the reason I pause on

13   that is because if there really were these

14   valuable programs that could stand on their own

15   and negotiate, I -- cable systems, I mean, they

16   know their demand really well. These are smart

17   firms, profit-maximizing enterprises. And they

18   could be doing that now.

19   JUDGE STRICKLER: Although they can't

20   because we can't have the hypothetical market

21   because we have Section 111. So they -- so you

22   may well be right --

23   THE WITNESS: But they could start

24   stations. They could start -- they could put

25   together networks. They could -- they could

1   bring this programming -- if they thought it

2   was so valuable, I feel like they could find a

3   way to bring it in their market now. Now,

4   maybe not everything.

5   So maybe what you say is true, but

6   this is the framework that an economist brings

7   to this question, is: Well, if it were so

8   valuable, we should be observing it now. And

9   we're not. We don't have this evidence that

10   they're clamoring for it. But --

11   JUDGE STRICKLER: Well, they do do it

12   now. They buy their own -- they buy stations

13   and they do whatever it is they have to do in

14   the unregulated market, but here we're talking

15   about what they would do in the absence of this

16   particular regulatory situation. How would

17   they construct the distantly retransmitted

18   programming? Would they just simply say it's

19   too expensive to negotiate and not worth -- not

20   only is it too expensive to negotiate but

21   there's just not enough value in these

22   individual programs or we'll just buy them in

23   bulk in the collective? Or will -- or will

24   they go ahead and buy individual programs?

25   Because we have to take a look and try to

1 figure out from the evidence and the testimony

2 what the hypothetical market would look like.

3 You seem to argue there's low value because

4 they're not doing it now, but I have a little

5 trouble with that because they can't do it now

6 because of the regulation.

7 And the transaction costs, I'm very

8 sympathetic to the argument. It makes good

9 sense, but it itself is hypothetical.

10 THE WITNESS: So I guess I am still of

11 the view that these distant signals are unified

12 wholes that are -- that would likely, in a

13 hypothetical market, stay together.

14 And there are mechanisms for some

15 particular shows, so, right, there are some

16 limits because of the compulsory license, but

17 very high value things could be sought and

18 brought in and licensed in various different

19 ways.

20 So my view is that the biggest

21 difference would be the price negotiations and

22 that some kind of intermediary at the stations

23 would take on that role.

24 And I guess outside of that, I would

25 think about it in terms of, well, here, for

1   thinking about relative market value, what of

2   these, you know, many, many possible tweaks

3   that we can consider would they change the

4   relative market value of the claimant

5   programming?

6   And so adding advertising to distant

7   signals to me would not alter the relative

8   market value of programming that we have now.

9   Dismantling the bundles, I don't really -- like

10   so here in the Canadian case, the Canadian

11   programming goes together, so there I don't

12   think that there -- that that would alter the

13   relative market value.

14   So I guess that's about -- I don't

15   want to say anything further on -- on -- like I

16   don't think I can speculate any further on some

17   of the details.

18   JUDGE STRICKLER: Thank you.

19   BY MS. PLOVNICK:

20   Q.   So let's move on to Exhibit 6051,

21   since we spent a lot of time on that one. If

22   you turn to page 20, which is also Bates

23   stamped CCG-5-000378.

24   A.   I'm there.

25   Q.   And is this the chart that you were

1   relying on in footnote 5?

2   A.   This is exactly that chart.

3   Q.   Okay.

4   JUDGE BARNETT: Excuse me.   We

5   referred to this document, I think, in passing

6   as the IAB report or something.   Could we have

7   the full name for the record?

8   MS. PLOVNICK: Absolutely, Your Honor.

9   BY MS. PLOVNICK:

10   Q.   So this is Exhibit 6051 and it is the

11   IAB Internet Advertising Revenue Report, 2013,

12   Full Year Results, and it's dated April 2014.

13   JUDGE BARNETT: Thank you.

14   MS. PLOVNICK: And it's also cited in

15   footnote 5 of Dr. George's direct testimony,

16   which is Exhibit 4005.

17   BY MS. PLOVNICK:

18   Q.   So this chart shows that cable

19   television advertising revenue, both for cable

20   -- national cable networks and local cable, is

21   increasing over time; is that correct?

22   A.   That's correct.

23   Q.   And it went up from 25 billion to

24   close to 35 billion from 2005 to 2013?

25   A.   Correct.

1   Q.   So in a hypothetical market with no

2   regulation, just to go back there just briefly,

3   before we get off of advertising completely,

4   given this increased value and increasing over

5   time of advertising in the cable industry,

6   don't you think advertising revenue -- there

7   would be advertising revenue to be had on

8   distant signals, that that would be a market

9   stream that cable operators would seek to

10   recover value from?

11   A.   Yes and no. So this isn't really

12   evidence of that. So this table, I view it as

13   important in these proceedings, because they --

14   they emphasize and they show that there are

15   opportunity costs.

16   So right now in the market, if a

17   viewer leaves TBS or some cable network that

18   has some advertising and they watch a show on a

19   distant signal, that's a loss. That's a loss

20   in the system's advertising calculation.

21   But to compensate for that, the

22   distant signal programming is special, it's

23   what keeps them in the market, what allows the

24   system to charge higher prices, and so that's

25   illustrating the opportunity cost, why it's not

1   just free to carry distant signals. So that's

2   how I use this.

3   And so the increase in advertising on

4   cable means they are certainly aware of places

5   where they can place ads and earn revenue. But

6   for the most part, this is still -- this is

7   still viewing-based. And our distant signals,

8   we know from the Nielsen -- the Nielsen data

9   and other sources, they're just not very well

10   viewed.

11   But, again, to the extent that they

12   want to go and put ads on the distant signals,

13   then I think they will be going after precisely

14   those niche customers. And so those niche

15   customers have -- so that the value for the

16   advertisers is, again, these people who have

17   the -- who care a lot about the content, not

18   the numbers.

19   And so we don't change the relative

20   market value. So that's -- when I think about

21   advertising, putting advertising on these

22   signals, does it change the relative market

23   value of the claimant programming that we

24   estimate here? And I kind of come up with this

25   answer of no.

1   Q.   And in a -- and you are presuming that

2   in a hypothetical, unregulated market that the

3   viewing to distant signals would still be

4   small. But we don't know that, do we? Because

5   it's hypothetical. It doesn't exactly exist.

6   A.   So we -- so we -- we do know that

7   viewing of distant signals is pretty darn low.

8   So --

9   Q.   In the current regulated market?

10   A.   So -- so what -- but there's nothing

11   that we're proposing in our hypothetical market

12   that would change that intrinsic cable system

13   demand. So we haven't talked about anything

14   there. Putting advertising is not going to

15   make the signals more interesting to --

16   Q.   Adding advertising is going to change

17   any of the factors of -- of cable operator

18   demand for these signals?

19   A.   I don't think -- I don't think it's

20   going to change the relative market value of

21   the different claimant categories.

22   Q.   What about demand, cable operator

23   demand?

24   A.   So the cable system operators -- so

25   cable system operators are going to look at the

1   distant signals in the way they do now. They

2   get to negotiate prices, so they might not --

3   you know, they won't have to have minimum fees,

4   so -- and they'll think about, will this

5   station allow me to boost my subscription

6   revenue? Will it bring in these specialty

7   pieces?

8   And then you're saying, well, you

9   know, will it also bring in some advertising

10   revenue? And to the extent that maybe some

11   advertisers want these niche people, we still

12   get this same relative calculation.

13   And so I'm arguing that even if

14   there's advertising there that goes into their

15   decision process, it doesn't change the

16   valuation.

17   Q.   But to put advertising on distant

18   signals in this hypothetical we've constructed

19   would be an additional revenue stream for cable

20   operators?

21   A.   Well, so does it lower the prices in

22   their market and push down advertising rates on

23   their other systems? So, of course, if you

24   increase supply, then you're going to --

25   advertising is super-competitive. So you

1   increase the supply of slots, you potentially

2   push down the prices there. So I don't -- you

3   know, maybe it's another stream but it affects

4   the others.

5   So, again, we're like -- you know, we

6   can use some economics to tackle this, but I

7   just don't see it altering the relative market

8   value of the programming, I guess.

9   Q.   All right. So, Dr. George, I now want

10   to move to your amended direct, which is

11   Exhibit 4006.

12   And in 4006, you recalculated your

13   proposed CCG royalty shares on a year-to-year

14   basis for 2010 to 2013?

15   A.   So this is the corrected number?

16   Right, yes, this is my amendment. Yes.

17   Q.   Did you calculate confidence intervals

18   for each of those year-specific shares? I

19   think that the shares are listed on page 4 in

20   D, where you have Summary and you list them for

21   each year. Did you --

22   A.   So I didn't change the regression.

23   Okay? So from my amendment, I didn't change

24   the regression coefficients. So the standard

25   errors on those remain the same.

1   What I updated were the shares that
2   were -- what I updated was the information on
3   the compensable minutes on U.S. distant
4   signals. And so I -- if I -- so I did not
5   report -- maybe I didn't -- I did not report
6   updated confidence intervals, but nothing in --
7   nothing in the regressions is different.
8   Q.   But you did not report confidence
9   intervals for each of these specific point
10   estimates that are on page 4?
11   A.   So page 4 is -- so the point estimates
12   are the regression coefficients. So they're
13   Table 2 in my original report. They have the
14   confidence intervals and they did not change.
15   So here I'm reporting that the shares
16   that we get from those.
17   Q.   That's right.
18   A.   And so I did not do -- did I --
19   Program Suppliers -- so I didn't do new -- let
20   me see. I'm not seeing them, but --
21   Q.   I also did not see them.
22   A.   So then I didn't do new confidence
23   intervals. But the standard errors are the
24   same here. So the standard errors are the
25   same.

1   Q.   The standard errors that you presented

2   in your direct testimony of Exhibit 4005 that

3   Mr. MacLean asked you about, those are the

4   same?

5   A.   So Table 2 is -- I didn't change the

6   regression. So I didn't change the regression.

7   So the standard errors on the regression

8   coefficients don't change. But I didn't

9   translate those into new intervals on all these

10   shares.

11   Q.   So there are no separate confidence

12   intervals for each of these share point

13   estimates on page 4?

14   A.   I didn't estimate them. But we used

15   the same -- the same bounds as we did in the --

16   in the non-amended testimony.

17   Q.   All right. I'm now going to turn to

18   your rebuttal testimony, which is Exhibit 4007.

19   And on page 7 of that document, and footnote 7,

20   you have what appears to be a criticism of

21   Dr. Crawford's analysis regarding his treatment

22   of minimum fees or that minimum fees continue

23   to be assessed at the system level.

24   And you end this footnote by saying

25   that Dr. Crawford's regression shares will tend

1 to be less precise than the estimated standard

2 errors would imply.

3 Can you explain that?

4 A. So my analysis and Dr. Crawford's

5 analysis are not the same. So we have -- we

6 have sort of a range in front of us on the

7 estimates. And, in general, I thought the

8 subscriber group approach was really -- was

9 smart, was a good way of using this new

10 information in STELA.

11 But as pointed out in the rebuttal

12 testimony I guess of Dr. Gray, there are

13 circumstances when firms pay minimum fees where

14 you add up the subscriber group payments that

15 are in his regression and they don't add up to

16 the totals that the system pays.

17 So I considered looking at subscriber

18 groups myself and so I had noticed this and

19 thought that, okay, so what happens is that you

20 -- there's some more error there because the

21 actual payments are -- the actual payments are

22 different than what you have for the subscriber

23 group sum.

24 So that this adds -- but in the end,

25 it turns out that it's really very little. It

1   turns out because so many systems, even if

2   they're paying minimum fees, they're at .9

3   DSE, .75 DSE, 1.1 DSE, they're all -- like the

4   systems today are very concentrated around that

5   1 DSE, that this unallocated minimum fees are

6   really pretty small.

7   So it is true that the standard errors

8   are larger. And we can't really interpret in

9   -- we can't readily interpret what they are.

10   We could go and calculate and make some

11   calculations.

12   But that is a limitation of the fixed

13   effects analysis at the subscriber group level,

14   but on balance I think the benefits of that

15   approach are worth that uncertainty cost.

16   Q.   So Dr. Crawford's confidence intervals

17   or standard errors should be wider than he

18   reports?

19   A.   Well, they are not estimated. So the

20   -- the uncertainty bands are bigger than what

21   we see in the statistics, but it's not that he

22   sort of maybe made a calculation wrong; it's

23   just something that's not captured.

24   Kind of in the same way when you do --

25   sorry.

1   Q.   Well, did you quantify this

2 imprecision in any way?

3   A.   So you can -- you can take for each

4 system -- I didn't come up with an estimate of

5 that. It could be done.

6   Q.   But you --

7   A.   But the minimum fee difference is not

8 very big.

9   Q.   But you agree that his confidence

10 intervals should be wider than he reports?

11   A.   I think that they are a little bit

12 wider, yeah.

13   Q.   All right. So turning to your

14 criticism of Dr. Israel, one of the issues that

15 you criticized Dr. Israel for was his failure

16 to utilize CRTC logs in program

17 categorization --

18   A.   Yes.

19   Q.   -- is this correct?

20   A.   That's correct.

21   Q.   And what are CRTC logs again?

22   A.   So the programming on Canadian distant

23 signals is categorized by the CCG and also by

24 Professor Crawford using the Canadian Radio

25 Television Commission, the log submitted to

1 that commission that oversees content

2 categorization.

3   And they are pretty rigorous. I've

4 read the rules on the page for what counts as

5 programming and how it's classified, and it

6 includes country of origin information. And

7 this is also what Dr. Crawford used.

8   And there's just not enough

9 information in the -- in Dr. Israel's analysis

10 to know, it doesn't say where this programming

11 comes from. And so the categorization as a

12 result for Canadian signals was pretty far off.

13   Q.   Did Dr. Gray also utilize CRTC logs in

14 his analysis?

15   A.   I don't know.

16   Q.   You don't know. You didn't review

17 that?

18   A.   I reviewed Dr. Gray's testimony, but

19 we have a different expert who will talk in

20 detail about that.

21   Q.   So you don't know, right?

22   A.   I don't know what categorization he

23 used.

24   Q.   So let's turn to Table 5 on page 22 of

25 your rebuttal testimony, which is also still

1   Exhibit 4007.

2   A.   Page again?

3   Q.   Page 22. So this is your adjustment

4   of Dr. Israel's regression, and you've already

5   talked today about what you did to calculate

6   these.

7   When you adjust Dr. Israel's results,

8   the royalty shares for Program Suppliers that

9   are reported in your column 2 CCG

10   classification, for Program Suppliers, they

11   increase, do they not?

12   A.   Yes.

13   Q.   They also increase for the Canadian

14   category?

15   A.   Yes.

16   Q.   Are these the only two categories that

17   they increase for?

18   A.   No. Sports goes up. Program

19   Suppliers goes up.

20   Q.   Sports goes up. Program Suppliers

21   goes up?

22   A.   Commercial TV goes up. Public TV,

23   yes.

24   Q.   So everyone goes up, other than the

25   Devotional category?

1   A.   Yes. I mean, these are, you know,

2   these are very small numbers. So yes. So they

3   -- yes.

4   Q.   So you would agree that Dr. Israel's

5   results under-value the Program Suppliers

6   category then, as he presented them?

7   A.   So we should -- to really make that

8   statement, do you -- we should go and look at

9   the Program Suppliers' report on what -- so I'm

10   looking here between column 1 and column 2.

11   Q.   Right.

12   A.   But I don't have in front of me the

13   Program Suppliers' estimate, but if it's less

14   than 39.1 --

15   Q.   So you would agree if it's less than

16   39.18, then Dr. Israel is undervaluing the

17   Program Suppliers' category?

18   A.   Then that would be my claim.

19   Q.   All right. And then if you turn to

20   Table 8 on page 28 and also Table 9, these are

21   your adjustments for Dr. Crawford's analysis,

22   correct?

23   A.   Correct.

24   Q.   And your adjustment also increases the

25   Program Suppliers' share over what Dr. Crawford

1   reported, correct?

2   A.   Correct.

3   Q.   And so you would agree that

4   Dr. Crawford's analysis undervalues the Program

5   Suppliers' category?

6   A.   With the caveat that these are the --

7   these are very, very close. And so there's not

8   a statistical test that I have here that this

9   difference -- but on its face it's higher, so,

10   yes.

11   Q.   So Dr. Crawford's results are lower

12   than what you would calculate?

13   A.   What I would calculate for Program

14   Suppliers.

15   Q.   All right.

16   MS. PLOVNICK: I have no further

17   questions.

18   MR. LAANE: Your Honor, I just have a

19   couple of brief follow-ups to Mr. MacLean's

20   questions.

21   JUDGE BARNETT: Okay.

22   RECROSS-EXAMINATION

23   BY MR. LAANE:

24   Q.   Dr. George, Mr. MacLean asked you

25   about some coefficients and whether they were

1 statistically significant or not for the Sports

2 category, and those coefficients were first, in

3 your regression, limited to the Canadian zone,

4 right?

5 A. Yes.

6 Q. And then your adjustments to

7 Dr. Israel's regression, right?

8 A. We talked about that, yes.

9 Q. Yes. Let me show you -- and if you

10 could give me the ELMO, please, Geoff -- Table

11 A4 from page 47 of your rebuttal testimony.

12 And although you didn't include the asterisks

13 for significance in the tables in the main body

14 of your report, here in the appendix, do you do

15 so for your adjustment to the CTV regression

16 that is Dr. Crawford's regression?

17 A. That's correct.

18 Q. Okay. And if we focus in here on the

19 Sports coefficients, are both of those

20 statistically significant?

21 A. They are.

22 Q. Okay. And we saw there were three

23 asterisks there. If you look on the next page,

24 you see three asterisks indicate p less than

25 0.001. What does that mean?

1   A.   So this is a very tight confidence

2 interval. So instead of a 1 percent, this is a

3 tenth of a percent. So it's a precise

4 estimate.

5   Q.   So you were asked about maybe the

6 bands around Crawford's estimate would be a

7 little wider. Even if they were a little

8 wider, it's pretty clear they'd still be

9 statistically significant?

10   A.   Agreed. Agreed.

11   Q.   Okay. And then just looking at the

12 other coefficients in your adjustment of the

13 Crawford regression, for each of the program

14 categories are all of those statistically

15 significant?

16   A.   Yes, they are.

17   MR. LAANE: Thank you. I have nothing

18 further.

19   JUDGE BARNETT: Any further

20 cross-examination?

21   MR. MacLEAN: May I ask one question?

22   JUDGE BARNETT: You may.

23   RECROSS-EXAMINATION

24 BY MR. MacLEAN:

25   Q.   Dr. George, why did you include

1   statistical significance markers on your

2   regression results for Dr. Crawford's

3   regression but not on your regression results

4   for Dr. Israel's regression?

5   A.   So I don't know the answer to that.

6   And I want to look now, that we just had this

7   question, did I include them in my appendix

8   table? And so -- because the testimony itself

9   is kind of a summary and an extract of the

10   complete results.

11   And so the adjusted JSC regression

12   results that are in on page 44, they do include

13   the statistical significance. So when I

14   reported them in summary in the body of the

15   testimony, I did not include them, but in the

16   full appendix, both the CTV and the JSC

17   adjustments are included, the statistical

18   significance is included.

19   MR. MacLEAN: Thank you.

20   JUDGE BARNETT: Redirect examination

21   for this witness?

22   MR. COSENTINO: No redirect, Your

23   Honor.

24   JUDGE BARNETT: Anything further?

25   Professor George, now you may be excused.

1   THE WITNESS: Thank you, Your Honor.

2   JUDGE BARNETT: Thank you for coming.

3   (Witness stood down.)

4   JUDGE BARNETT: Who is up next?

5   MR. COSENTINO: Your Honor, our next

6   witness is not available until tomorrow

7   morning.

8   JUDGE BARNETT: Okay. Is that

9   Mr. Shum?

10   MR. COSENTINO: Yes.

11   JUDGE BARNETT: Does anyone else have

12   a witness here today?

13   MR. GARRETT: I can testify if you

14   want.

15   (Laughter.)

16   JUDGE STRICKLER: Under oath?

17   JUDGE BARNETT: We have not had time

18   to practice our tap dance routine so we're not

19   going to perform. But I guess we will be at

20   recess until 9:00 o'clock in the morning.

21   Thank you.

22   (Whereupon, at 2:50 p.m., the trial

23   recessed, to reconvene at 9:00 a.m. on Tuesday,

24   March 6, 2018.)

25

1   C O N T E N T S

2 . WITNESS: DIRECT   CROSS   REDIRECT   RECROSS

16   AFTERNOON SESSION: 2089

17   CONFIDENTIAL SESSIONS: NONE

18

19   E X H I B I T S

20 EXHIBIT NO: MARKED/RECEIVED   REJECTED

1   CERTIFICATE

2

3   I certify that the foregoing is a true and

4 accurate transcript, to the best of my skill and

5 ability, from my stenographic notes of this

6 proceeding.

7

8

9 3-5-78

10 Date   Signature of the Court Reporter

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11:06 [1] 2040:10
111 [6] 2067:3 2136:22 2137:5
  2139:3 2154:7 2161:21
11th [1] 2016:2
12 [1] 2086:23
12:01 [1] 2088:8
1200 [1] 1955:7
1233 [1] 1954:19
13 [4] 1986:10 1993:22 2080:2,11
14 [6] 1989:12 1993:11,17 1994:1
  1996:4 2094:9
15 [3] 1996:11 2007:23 2040:8
150 [1] 2106:23
150-mile [1] 1976:13
16 [3] 2008:3 2086:3,20
1629 [1] 1954:5
17 [1] 2014:6
17th [1] 2015:14
18 [2] 1986:12 2016:8
1818 [1] 1953:9
18th [1] 2096:25
19 [5] 2153:3,4,7,16 2154:1
19-1 [1] 2097:17
19-2 [1] 2097:17
19.1 [1] 2097:18
1958 [1] 2184:5

1977 [1] 2184:6
1987 [1] 2184:23
199 [2] 2100:9,10

2

2 [11] 2016:7,7 2051:21 2061:3
  2072:6 2095:13 2097:2 2171:13
  2172:5 2177:9 2178:10
2.8 [1] 2118:14
2:50 [1] 2183:22
20 [3] 2080:3 2154:24 2164:22
20.01 [1] 2029:4
200 [1] 1954:11
20001 [2] 1952:10 1953:20
20004 [1] 1952:24
20006 [1] 1954:6
2002 [2] 1960:10 2184:7
20036 [3] 1953:10 1954:20 1955:8
20037 [1] 1952:16
2004 [6] 2026:7 2079:4,7,13 2080:
  9 2135:5
2004-'05 [1] 2065:24
2004-05 [1] 2080:1
2004-2005 [2] 2072:9 2106:3
2004-2013 [2] 2078:25 2079:1
2004/'05 [1] 2065:17
2004/2005 [3] 1982:4 2043:7 2080:
  14
2005 [3] 2026:7 2135:5 2165:24
2010 [15] 2006:2,4 2016:9,11 2029:
  15 2032:13 2046:7 2054:6 2061:9
  2075:20 2076:7 2079:8 2080:2,11
  2170:14
2011 [3] 2006:9 2032:14 2184:10
2012 [5] 2006:11 2016:9,11 2032:
  14 2054:7
2012_2 [1] 2014:21
2013 [19] 2006:2,13 2016:12 2029:
  15 2032:14 2054:9 2061:10 2075:
  20 2076:7 2079:5,8,14 2087:23
  2095:13 2150:12 2153:2 2165:11,
  24 2170:14
2014 [1] 2165:12
2017 [3] 2014:6 2015:14 2016:2
2018 [2] 1951:17 2183:24
202-355-6432 [1] 1954:7
202-355-7917 [1] 1953:11
202-408-7600 [1] 1954:21
202-624-2685 [1] 1952:25
202-626-6688 [1] 1952:17
202-662-4956 [1] 1953:21
202-663-8183 [1] 1955:9
202-942-5000 [1] 1952:11
2064 [1] 2184:11
2089 [2] 2184:12,16
2096 [1] 2184:22
20th [1] 1954:19
21 [4] 2085:3 2120:3,7,9
2100 [1] 2184:21
2134 [1] 2184:13
2152 [2] 2184:24,25
2179 [1] 2184:14
2181 [1] 2184:15

22 [4] 2051:14 2125:22 2176:24
  2177:3
23 [1] 2050:14
24 [2] 2132:5,11
24-hour [1] 2079:22
25 [2] 2085:18 2165:23
25.4 [3] 2028:21,22 2029:3
2500 [1] 1952:15
26 [2] 1991:17 2086:12
26,000 [1] 2058:6
27 [1] 2006:11
28 [5] 2029:1 2060:19 2108:22,23
  2178:20
2A [1] 2076:21
2b [3] 2076:22,23,24

3

3 [16] 2005:25 2006:5,18 2027:1
  2030:4,13 2066:1,2 2069:22 2070:
  5,6,7 2099:1,7,16 2115:4
3.1 [4] 2076:8,20 2077:1 2098:19
3.2 [1] 2098:19
3/5/18 [1] 2185:9
30.47 [1] 2052:20
300 [1] 1954:5
32 [1] 2006:13
32.92 [1] 2110:7
34 [1] 2087:20
35 [1] 2165:24
37 [2] 2087:23 2128:18
38 [7] 2077:11,15 2078:2 2115:3
  2118:6,7,12
39.1 [1] 2178:14
39.18 [1] 2178:16

4

4 [17] 2005:21 2006:16,18 2029:16
  2085:2 2099:3,7,17 2120:3,6
  2127:11,13,22 2170:19 2171:10,
  11 2172:13
4.3 [1] 2060:9
4.75 [2] 2060:9 2063:20
40 [1] 2006:5
4003 [3] 1960:19 1980:12 1986:11
4005 [13] 2014:9 2023:16 2066:18
  2094:9 2108:22 2118:5,12 2134:
  25 2149:12,20 2152:10 2165:16
  2172:2
4006 [8] 2015:10 2026:20,22 2069:
  23 2077:22 2115:3 2170:11,12
4007 [7] 2015:23 2051:13 2060:19
  2120:3 2128:18 2172:18 2177:1
4009 [1] 2076:17
405 [1] 2014:2
42 [1] 2006:9
44 [1] 2182:12
47 [2] 2154:1 2180:11

5

5 [18] 1951:17 1981:23 2051:14,15
  2114:15,23,23 2125:24 2127:12,
  14,22 2150:8,9 2151:4,20 2165:1,
  15 2176:24

50 [1] 2091:10
5031 [6] 2099:24,24 2100:3,5,6
  2184:21
5032 [6] 2096:1,8,16,20,21 2184:
  22
530 [1] 1954:11
57 [2] 2014:17 2023:16

6

6 [12] 1981:23 1991:17 2066:1,2
  2069:22 2070:6 2085:18 2099:4,7,
  18 2152:8 2183:24
6.55 [1] 2032:13
6.61 [1] 2032:13
6.97 [2] 2052:2 2054:2
601 [1] 1952:9
6049 [6] 1986:22,25 1987:12,14,15
  2184:23
6050 [7] 2150:19 2151:2,24 2152:1,
  3 2153:2 2184:24
6051 [9] 2150:19 2151:3,16,24
  2152:1,3 2164:20 2165:10 2184:
  25
626-795-6001 [1] 1954:13

7

7 [8] 1964:6 2046:25 2086:11 2149:
  11,13,20 2172:19,19
7.11 [2] 2029:8 2063:21
7.47 [1] 2032:14
7.85 [1] 2032:14
703 [1] 1954:19
75 [2] 2091:11 2174:3

8

8 [5] 1964:8 2038:19 2046:25 2077:
  10 2178:20
8.69 [1] 2080:8
8.8 [1] 2118:14
80 [1] 2091:19
850 [1] 1953:19
88.88 [1] 2109:25
8th [1] 1953:9

9

9 [5] 1980:11 2046:25 2087:16
  2174:2 2178:20
9:00 [2] 2183:20,23
9:07 [2] 1951:19 1956:2
90 [3] 2093:19 2094:3 2106:22
906 [1] 2112:11
91101 [1] 1954:12
93 [4] 1961:19 2094:21 2103:8,9
95 [2] 2114:21 2119:15
96 [4] 2006:22 2007:2,4,10
97 [2] 2006:22 2007:10
99 [1] 2110:4

A

a.m [5] 1951:19 1956:2 2040:9,10
  2183:23
A4 [1] 2180:11
ability [8] 2136:15 2142:4 2146:5
  2155:2,16 2156:19 2157:6 2185:5

able [5] 1964:21 1982:16 1995:25 2054:14 2118:9
above [3] 2076:23 2095:5 2110:18
absence [3] 1965:1 2154:21 2162:15
absolute [1] 2102:25
Absolutely [3] 2068:3 2114:2 2165:8
abstract [1] 1987:23
accept [1] 2080:11
accepted [1] 1962:15
access [3] 2078:12,19,19
according [6] 1992:12 2017:11 2073:10 2099:12 2100:19 2137:9
account [20] 2019:13 2023:13 2048:24 2050:25 2057:2,6 2058:9 2061:10 2062:9 2082:23 2095:17 2096:9,12 2102:9 2103:20 2107:5, 22 2108:11,13,14
accounting [8] 2016:9 2023:23 2058:7 2070:19 2071:3 2075:1 2076:2 2095:13
accuracy [1] 1987:25
accurate [2] 2067:1 2185:4
accurately [2] 2035:15 2039:14
achieve [1] 2020:23
acknowledge [1] 2154:17
acronym [1] 2046:6
across [3] 2058:13 2087:21 2090:3
Act [1] 2136:25
active [5] 1971:8,15,23 1972:9 1973:12
activity [1] 1971:6
actual [3] 2117:13 2173:21,21
actually [21] 1969:20 1974:10 1980:1 1989:3,9 1991:14 2030:13 2033:19 2036:18 2070:4 2079:17 2080:3,12 2081:15 2094:11 2101:5 2105:16 2110:10 2114:4 2147:18 2157:15
ad-supported [1] 2117:23
add [10] 1997:2 2039:7,8 2047:3,4 2117:6 2129:23 2132:8 2173:14, 15
added [8] 1992:6 2038:21,23 2041:14 2102:5 2118:17 2120:21 2121:12
adding [11] 2035:1,10,18 2041:7,9 2132:4,5,21 2133:9 2164:6 2168:16
addition [3] 2109:3 2133:16 2142:15
additional [5] 2015:6 2021:1 2095:7 2102:19 2169:19
address [13] 1967:6,15 1969:2,6 1995:4,4 2019:8 2032:17 2040:21 2041:20 2048:6 2049:6 2082:2
addressed [6] 1967:3 1970:7 2041:5,7 2047:20 2083:21
addressing [1] 2128:21
adds [2] 2117:9 2173:24

adjust [9] 2050:20 2051:25 2055:25 2057:7 2060:10,12 2119:2 2128:2 2177:7
adjusted [15] 1970:5 1983:7 2045:22 2050:21,22,24 2051:23 2053:12 2061:9,18 2063:19 2087:7 2114:10 2120:15 2182:11
adjusting [1] 2060:21
adjustment [19] 1985:22 1986:6 2057:1 2059:24 2060:7 2061:5,5 2063:3,4,12 2087:8,15 2102:3,4 2125:20 2177:3 2178:24 2180:15 2181:12
adjustments [17] 2040:4,5,22 2041:13 2043:24 2044:8 2045:20 2059:21,23 2062:19,24 2080:17 2120:4,12 2178:21 2180:6 2182:17
adjusts [1] 2054:17
ADKINS [6] 1952:7 2002:19,22,25 2003:2 2184:7
administering [2] 1966:11 1984:2
administrative [1] 1959:7
admission [1] 2100:3
admit [3] 1987:12 2096:16 2151:23
admitted [10] 1960:20 1987:3,14 2014:3 2015:11,24 2076:16 2096:20 2100:5 2152:2
adopt [1] 2147:20
adopted [2] 2154:24 2156:17
ads [3] 2141:4 2167:5,12
advanced [1] 1972:7
adverse [1] 2154:18
adversely [4] 2155:1,15 2156:19 2157:7
advertise [3] 2129:3 2146:5,16
advertisements [3] 2144:11 2145:8,9
advertiser [1] 2116:12
advertisers [7] 2144:20,22 2145:5 2147:21 2148:3 2167:16 2169:11
advertising [35] 2139:8,17 2140:22 2144:1,4,10 2145:16 2146:4 2147:8,12,24 2148:8 2150:1,5,7, 14 2164:6 2165:11,19 2166:3,5,6, 7,18,20 2167:3,21,21 2168:14,16 2169:9,14,17,22,25
advisable [1] 1974:25
advisory [2] 1961:15 1962:3
affect [10] 2059:1 2108:2,3,4 2131:25,25 2155:2,15 2156:19 2157:15
affected [2] 2073:20 2157:8
affects [4] 2101:25 2102:1 2131:17 2170:3
affirm [3] 1961:5 2014:24 2016:14
afford [1] 1986:3
afforded [1] 1985:8
AFTERNOON [5] 2089:1,3,9 2134:4 2184:16
agencies [2] 1966:16 1971:20
aggregate [2] 2055:15 2068:7

aggregated [1] 2159:6
ago [1] 1973:17
agree [22] 1983:11 1993:23 2003:17,24 2037:1 2056:6 2065:4 2066:13,14 2085:6 2092:17 2093:6 2109:11,18 2114:13 2132:18 2139:3,4 2175:9 2178:4,15 2179:3
agreed [3] 2081:2 2181:10,10
agreeing [2] 1994:7 1995:12
ahead [4] 1975:13 1990:8 1993:10 2162:24
aiming [1] 2112:20
aired [3] 1992:20,23 2001:23
Alabama [1] 2049:2.
ALAN [1] 1952:3
ALBINA [1] 1953:6
ALESHA [1] 1953:5
all-else-equal [4] 2024:15 2035:5, 14 2101:13
all-star [1] 2161:2
allocate [4] 1970:10 1983:7 1984:21 2017:4
allocated [3] 1983:21 1984:6,15
allocation [10] 1962:24 1980:14 1983:12 1985:2 1986:25 2076:2, 11 2077:1 2137:25 2150:23
allocations [2] 1963:5 2076:1
allow [4] 1973:13 2052:24 2115:14 2169:5
allowed [2] 2046:7 2084:18
allows [1] 2166:23
almost [2] 2050:7 2127:3
alone [1] 2036:7
already [5] 1968:3 2041:4 2076:16 2159:5 2177:4
alter [2] 2164:7,12
altering [1] 2170:7
alternative [2] 2141:16 2154:22
alternatively [1] 1971:8
although [4] 1981:9 2154:17 2161:19 2180:12
amend [1] 2049:6
amended [9] 2026:9,19 2029:16 2069:21 2070:5,6,7 2115:2 2170:10
amendment [5] 2015:13 2069:22 2070:1 2170:16,23
American [1] 1974:4
Amherst [1] 1958:17
among [1] 1984:22
amount [13] 2010:13,14 2042:3 2075:8 2081:16 2089:18 2092:8 2102:18 2112:4 2116:9 2126:2,5 2157:9
analyses [3] 2018:15 2020:11 2141:17
analysis [68] 1964:14 1977:10 2007:3 2018:21 2019:14 2020:6, 25 2022:4,20 2023:3 2024:4 2025:6 2026:4,5,7 2027:4 2032:5,7,10 2041:21 2043:8,11,24 2044:5

2047:21,25 2048:2,4 2050:3,5 2055:1 2056:9,10,21 2061:15,16, 18 2062:8,12,14,17 2063:5,11 2066:17 2071:3 2075:3 2076:11 2077:8 2082:3,11,12 2101:13,23 2112:13 2131:21 2134:16,20 2135:9 2152:17,24 2172:21 2173:4,5 2174:13 2176:9,14 2178:21 2179:4
analytical [1] 2062:22
ANN [1] 1952:21
annual [1] 2061:7
another [17] 2001:6 2030:18 2036:20 2037:8 2038:3,8 2043:19,19 2047:4,4 2058:22 2106:21 2109:2 2129:24 2131:3 2139:6 2170:3
answer [10] 1976:15 1984:1 2009:10,14 2127:1 2128:11 2155:9 2158:18 2167:25 2182:5
answering [3] 1966:14 1972:2 1999:14
answers [4] 1959:18 1962:10 1987:25 2033:6
Anybody [2] 2064:11 2103:18
anyway [1] 2125:2
apart [1] 2159:21
apologize [2] 2009:21 2155:10
appeal [2] 2144:16,17
appeals [2] 2142:20 2145:5
appear [2] 1972:14 2026:20
APPEARANCES [3] 1953:1 1954:1 1955:1
appearing [3] 1958:10 2012:5,6
appears [4] 1985:15 1987:10 2053:7 2172:20
Appendix [5] 1961:9 2015:3 2180:14 2182:7,16
applaud [2] 1963:23 1969:8
applied [1] 2012:12
applies [1] 1994:9
apply [3] 1974:16 1985:14 2010:4
applying [2] 2010:3 2094:16
approach [28] 1963:7,25 1986:23 2019:2,5,15 2022:2,3 2043:10 2058:16 2059:25 2070:19 2071:3, 17 2072:17 2075:4,7,17 2117:2 2120:1 2128:13 2134:19 2135:1, 25 2141:23 2147:16 2173:8 2174:15
approached [1] 2019:5
approaches [1] 2018:6
appropriate [10] 1965:6 1976:11, 21 1980:23 1981:18 1985:13,15, 18 2001:8 2009:15
appropriateness [1] 1976:23
approximately [1] 2006:22
April [1] 2165:12
arbitrary [1] 2043:18
area [7] 1962:5 2007:13 2105:8,9, 13,14,23
aren't [5] 1964:13 1990:10 2037:18,19 2117:20

argue [1] 2163:3
arguing [2] 2043:6 2169:13
argument [8] 2038:4 2072:20
2073:16,24 2142:25 2158:3,19
2163:8
arguments [1] 2142:18
Arnold [2] 1952:8 1954:16
around [5] 1957:22 2006:18 2105:
18 2174:4 2181:6
arrangements [1] 2067:8
article [7] 1986:13,18,19 1987:8,
18 1988:8 1991:18
articles [3] 1961:20 2013:10,12
ASCAP [1] 2159:8
aspect [4] 2020:13 2028:14 2130:
7 2132:2
aspects [3] 1962:7 2018:5 2057:
19
assess [1] 2071:20
assessed [1] 2172:23
assign [3] 1969:15 2090:18,19
assigned [2] 1964:20 1969:24
assigning [2] 1964:16 1989:25
assist [1] 2017:18
associated [3] 2020:16 2021:10
2105:11
Association [1] 1974:4
assume [8] 1965:6 2002:7 2004:
16,20 2005:2,7,10 2091:24
assumes [1] 2118:22
assuming [1] 2115:20
assumption [1] 2095:25
assumptions [1] 2065:10
asterisk [1] 2097:6
asterisks [6] 2110:1 2122:20
2123:14 2180:12,23,24
attached [1] 1961:8
attempt [2] 1969:20 1982:24
attempted [1] 2067:19
attention [4] 1959:19 1986:10
2007:22 2051:16
attitudinal [1] 2134:22
attorney [1] 2073:18
attorneys [1] 2073:3
attract [3] 2146:16,19 2150:4
attracting [2] 2143:21 2145:3
attracts [2] 2031:21,22
attributed [3] 1983:16,17,18
attributes [1] 2007:3
Atypical [17] 1968:5,17 1988:11,
14,16 1990:23 1991:4,8,9,16,22,
22 1992:1,7,8,17,18
audience [1] 2159:19
augmented [1] 2066:12
author [1] 1961:21
authored [1] 1987:9
available [9] 2019:7 2022:16 2023:
9 2059:2 2068:15 2094:21 2134:
12 2138:19 2183:6
Avatar [1] 1990:17
Avenue [4] 1951:15 1952:9,23
1954:11

average [7] 2021:18 2039:15 2086:
13,17 2087:20 2090:4 2092:20
averaged [1] 2029:11
avoid [1] 2113:3
awarded [1] 2072:11
aware [5] 1981:3 1982:23 1983:5
2071:6 2167:4
away [9] 2107:10 2116:11,12 2132:
10,21 2133:10 2140:11 2150:4
2157:11

B

b19 [1] 2014:20
Bachelor's [2] 1958:15 2012:10
back [21] 1956:9 1974:1 1976:3
1980:9 1987:1 1992:4 1993:22
2019:4 2032:16 2037:4 2040:2,20
2047:14 2051:18 2053:16 2056:4
2074:16 2109:22 2116:5 2152:8
2166:2
background [2] 1958:14 2106:14
bad [3] 2043:20 2044:18 2045:12
balance [1] 2174:14
band [2] 1976:9,13
bands [2] 2174:20 2181:6
barely [1] 2114:13
bargaining [4] 2140:12 2141:12
2157:13 2158:8
BARNETT [70] 1951:9 1956:3,13,
22 1957:4,7,20 1958:1 1962:17
1971:3 1972:12,24 1973:15 1977:
15,18 1987:2,6,13 2002:16 2007:
17,20 2010:17,20,25 2011:6,12,17
2014:7,10 2016:22 2019:19 2033:
8 2040:7,11 2053:3,6,24 2064:2,7,
11,19 2073:2,17 2074:7,11 2088:2,
5 2089:3 2096:20 2100:5 2124:20
2125:7 2152:1 2155:8,12,22 2156:
1,12 2165:4,13 2179:21 2181:19,
22 2182:20,24 2183:2,4,8,11,17
base [1] 1964:9
based [18] 1965:12,15 1976:17
2020:6 2032:9 2036:10,22 2038:
13 2063:13 2099:11 2109:19
2111:11 2118:19 2134:16 2135:2
2140:23 2146:16 2156:7
baseline [1] 2108:24
basic [4] 2072:10 2080:20 2089:20
2138:3
basically [6] 2069:15 2075:3 2089:
15,19 2115:6 2138:5
basis [23] 1999:14 2006:2,6,17,24
2020:18 2029:15 2035:14 2074:
12 2094:1,5 2096:16 2097:21
2098:5,10 2099:23 2100:24 2101:
7,12 2103:7 2144:21 2158:20
2170:14
Bates [6] 2151:12 2153:5,8,12
2154:1 2164:22
bear [1] 2030:11
become [5] 1973:11,18 2121:13
2143:23 2145:10
becoming [1] 2019:18

begin [3] 1956:10,16 2011:14
beginning [4] 2018:24 2019:4
2074:17 2079:12
begins [1] 2008:2
begun [1] 1975:5
behalf [10] 1952:2,18 1953:2,13
1954:2,15 1955:2 1958:10 2012:4,
6
behavior [1] 2134:16
behind [1] 1957:24
believe [24] 1966:3 1970:8 1978:
24 1982:9,20 1995:2,5 1999:6,8,
10 2000:5,6 2003:14 2032:19
2033:2 2034:22 2054:2 2080:5,6
2092:12 2093:5 2106:20 2124:20
2136:3
believed [1] 2083:13
believes [1] 2155:14
belong [2] 1974:3 2069:4
belonged [1] 2081:11
belongs [1] 2071:14
below [9] 2039:2 2045:16 2053:16
2099:2 2110:7,19 2128:5,5,6
Bench [1] 2064:3
benefit [4] 2008:17 2107:14,17
2161:8
benefits [5] 2104:7 2105:22 2107:
15 2108:15 2174:14
BENJAMIN [1] 1954:17
best [12] 1959:12 1966:9 2019:15
2063:15 2111:23 2112:7,10 2113:
25 2124:11 2161:5,5 2185:4
better [10] 1959:17,21 1970:3
1991:5 1997:2,9 2078:13 2123:16
2124:14 2134:22
between [21] 1964:6,7 2022:2
2023:3 2036:12 2044:10 2063:19
2081:7,22 2089:16 2101:21 2108:
7,7 2112:3 2120:18 2127:21 2143:
3 2145:20 2146:7 2157:24 2178:
10
beyond [2] 1982:12 2149:4
bias [10] 1966:4 1968:19,22 1970:
19 1972:19 2005:12 2035:23
2045:8 2057:10,10
biased [1] 2010:11
big [6] 2082:20 2105:3,3,13 2141:
10 2175:8
bigger [2] 2091:24 2174:20
biggest [1] 2163:20
billion [2] 2165:23,24
binder [7] 1960:17 1986:21 2014:1
2015:10 2150:17,20,24
bit [12] 1981:22 2023:6 2043:9
2047:15 2065:9 2066:17 2080:17
2110:17 2145:14 2149:10 2156:2
2175:11
blah [3] 2072:11,12,12
block [1] 2097:2
blow [2] 2094:10,14
board [5] 1961:15,25 1962:2 1963:
5 2090:3

boards [1] 1961:23
body [2] 2180:13 2182:14
Boggs [1] 1952:14
boost [1] 2169:5
border [1] 1976:9
Bortz [13] 1963:11 1964:5 1966:19
1970:9 1978:4,8 1981:19,23 1982:
5,20 1986:1 2005:19 2066:12
Bortz's [1] 1981:23
both [17] 1971:15 1972:13 1978:4,
22 2051:8,22 2058:20 2090:22,25
2091:13 2098:22 2107:19 2143:
13 2145:21 2165:19 2180:19
2182:16
bottom [18] 2007:22 2014:19 2029:
5 2030:1 2052:8,14 2060:25 2061:
6,8 2094:14 2097:9 2118:8 2124:
16,17 2151:12 2152:11 2153:13,
25
Boudreau [3] 1956:21 1957:1
2049:20
bound [3] 2118:18,19 2119:17
bounds [4] 2039:9 2095:4 2119:1
2172:15
brand-new [1] 1988:23
break [1] 2088:4
breakdown [7] 2022:17,19,24
2029:14 2055:17,20 2061:7
breaking [1] 2159:21
breaks [1] 2052:15
brief [2] 2002:19 2179:19
briefly [2] 2005:18 2166:2
bring [12] 1966:1 1967:9 1990:10
1995:25 1997:6 2000:1,16 2062:4
2162:1,3 2169:6,9
bringing [3] 1967:21,22 1968:23
brings [2] 2144:19 2162:6
British [1] 2000:6
broadcast [22] 1996:13,17,23
1997:11 1998:15 2000:9 2079:22
2101:11 2135:25,25 2136:10,21
2139:21 2141:23 2144:21 2152:
14 2155:2,16 2156:20,25 2157:7,9
broadcaster [11] 2136:14 2137:16
2138:9 2139:22 2141:24 2142:3,
13 2143:4 2145:21 2146:8 2148:
19
Broadcasting [7] 1956:18 1957:8
1998:4,13 2091:7 2100:23 2144:
13
brought [2] 1991:1 2163:18
BRYAN [2] 1952:7 2002:25
Brynteson [2] 1951:23 2185:9
Buckeye [9] 2094:20 2095:5,12
2096:13 2100:20 2102:14,15,23
2103:14
BUDRON [1] 1953:7
build [1] 1962:12
Building [1] 1951:14
built [2] 2129:22,22
bulk [1] 2162:23
bullet [8] 2032:17 2040:3,21 2047:

18 2056:5 2149:13,17 2152:10
bunch [1] 2161:3
bundle [3] 2132:1 2157:3 2159:8
bundles [3] 2141:5 2149:1 2164:9
burden [1] 2001:14
Bureau [3] 1960:11,13 2150:14
Burling [1] 1953:17
business [1] 2159:9
Busytown [1] 1996:8
butter [1] 1992:2
buy [4] 2162:12,12,22,24

· · C

CA [1] 1954:12
CABLE [78] 1951:6 1963:1 1964:3,
12 1999:3 2001:19,22 2020:14
2021:4 2023:22 2030:4,8 2031:19,
24 2046:7,12,16 2062:2 2067:2
2072:14 2083:16 2089:21,24
2094:20 2095:5 2100:20,21 2102:
2 2104:5,25 2106:9,11 2117:24
2129:8,13 2134:17 2135:5,11,13,
14,16 2136:9,15,20 2137:3,22
2138:12 2139:7 2140:17 2143:18
2145:3 2148:6 2149:25 2150:2,5,
6 2152:14,20 2154:20 2157:3
2158:23 2160:21 2161:1,15 2165:
18,19,20,20 2166:5,9,17 2167:4
2168:12,17,22,24,25 2169:19
Cablevision [1] 2096:13
calculate [18] 2025:2,20 2028:8
2029:2,24 2034:18 2070:21 2111:
6,7,11 2118:15 2123:14 2133:14
2170:17 2174:10 2177:5 2179:12,
13
calculated [7] 2028:6 2113:15,17
2118:11,17,20 2119:10
calculating [4] 2060:6 2115:13
2118:25 2135:2
calculation [7] 2028:25 2029:5
2111:13 2125:3 2166:20 2169:12
2174:22
calculations [5] 2113:7 2115:2,5
2125:20 2174:11
call [7] 1956:15 1957:6 1960:2
1973:7 1979:14 2080:22,22
called [11] 1959:5 1961:25 1965:
24 1971:20 1984:19 1991:13,16
2015:23 2066:20 2078:5 2150:20
calling [2] 2011:1,3
calls [1] 2155:20
came [1] 2075:1
Canada [10] 2049:24 2108:6 2120:
18,25 2124:4,20,23 2126:6 2127:4,
10
Canadian [220] 1954:2 1956:10,18,
19 1957:8 1958:12 1964:4,13,16
1965:14,17 1966:5 1967:8,9,9
1969:4,13,22 1970:11,20 1976:5,6,
8 1977:12 1978:12 1979:1 1981:3,
24 1982:19 1983:17 1984:14
1996:6,13,18,23 1997:11 1998:3,
13,13 2000:2,8,9,14 2001:23 2005:

20 2006:1,6,17,23,25 2007:4,9
2012:7 2018:1,5,16 2019:16 2022:
5,22 2023:1,5,11 2024:5,5,7,9
2025:24,25 2027:12,13,14,16
2028:6,16,16,19,21,23,24 2029:8,
10 2030:5 2031:4,9,11,13 2032:1,
9,11 2038:22 2041:22,23,24 2045:
24 2048:22 2049:1,13,14,19,21
2050:4,10,11,15,18 2051:23 2052:
2,13,16,16,23 2053:8,10,20 2054:
9,11 2055:22 2060:2,8 2061:11
2063:3,7,16 2066:21,24,25 2067:2,
4,12,20 2068:10,11,22 2069:1,4,4,
9,16,17,17,19 2070:13 2071:2,8,
14,15,18,21 2072:2,9,13,23 2073:
8,9,11,12 2074:19 2075:9,11,11,
19 2076:6,19 2077:6 2078:6 2080:
21 2081:9,11,17,21 2082:3,4,23
2083:10,13,20 2084:20 2086:3,21,
24 2101:6,19,23 2103:7,9,11 2109:
23 2111:8,11 2112:24 2114:1
2115:20,25 2116:8,14,18,20 2117:
1,20 2118:15 2119:1,8,13 2121:18,
19 2122:14,25 2123:2,4 2124:5
2125:16 2145:1 2158:13 2164:10,
10 2175:22,24 2176:12 2177:13
2180:3
Canadian-only [5] 1982:10,25
1983:8 1984:6 1985:9
Canadians [8] 2069:9 2071:5,6,16
2074:1 2080:8,13 2121:15
cannot [1] 1980:12
CANTOR [1] 1952:5
cap [1] 2132:7
Capitals [1] 2069:8
capped [2] 1964:19 2005:19
caps [1] 2006:24
capture [1] 2095:19
captured [3] 2104:24 2105:1 2174:
23
capturing [1] 2103:6
Carbert [1] 1957:3
care [11] 2024:12,17,19 2035:20
2041:11 2144:22 2147:22,23
2148:4,6 2167:17   ·
careful [5] 1957:13 2003:21 2009:
8 2086:8 2155:9
Carnegie [1] 1958:20
carriage [24] 2020:13 2030:7 2048:
21 2054:8,10 2058:12 2059:6
2067:12 2095:3,6,21 2101:23
2103:7,25 2106:23 2108:4 2129:3
2141:23,25 2143:16 2152:12,15,
20 2157:14
carried [28] 1965:16 1969:3,12,13,
21 1982:19 1983:15,17 1984:8,10
2006:1,5,16 2021:9,9,11,13 2042:
4 2090:2,24 2091:21 2094:4 2098:
4,9 2099:22 2103:11 2106:8 2129:
7
carries [1] 2002:3
carry [31] 1964:4,13,21 1976:6,7,

18,19 2006:23 2020:15,16 2021:5
2030:15 2037:6,7 2049:1 2059:8,
9 2067:4 2093:11,15 2098:22
2104:1,2,4 2105:3,8 2107:9 2130:
25 2136:2,12 2167:1
carrying [15] 2023:11 2037:15
2053:9 2066:24 2090:9 2093:17,
18,21,24 2094:1,2 2095:5 2102:19,
23 2107:15
case [14] 1963:2 1966:4 1970:17
1974:22 2010:4,9,10 2043:14
2044:15 2075:15 2080:15 2094:7
2103:24 2164:10
cases [6] 1969:14 1974:16 1983:
16 2009:18,24 2044:16
categories [62] 1965:9,11,14,22,
24,25 1966:3,24 1967:5,13,17
1968:8 1977:7 1978:11,16,22,23
1979:1,4,8,8,14,16,17,19,23 1980:
20 1981:2,15 1984:22 1989:23
1997:10 1998:8 1999:1,2,12,18
2010:13 2017:6 2022:7 2024:1,2,
24 2027:7,10,19 2056:24 2069:3
2081:3,22 2082:1 2089:17 2120:
18 2121:12 2129:20 2148:21
2149:5,5,7 2168:21 2177:16 2181:
14
categorization [11] 1998:11 2050:
23 2060:13,15 2081:6,8,15 2175:
17 2176:2,11,22
categorizations [8] 2080:21,23
2081:8,23 2082:6,8,17 2083:3
categorize [1] 1974:7
categorized [1] 2175:23
categorizing [1] 1998:12
category [52] 1965:20 1967:15,23
1968:1,13 1988:15,19,22,23,25
1989:1,3,8,13,18,19,25 1990:22
1991:15 1995:9,24 1996:6,17,21
1997:5,6 1999:23 2000:1,8,14,17,
24 2004:4,14 2024:11 2025:16
2034:21 2035:1 2069:11 2081:10,
11,21 2083:8 2086:14 2124:19
2126:6 2177:14,25 2178:6,17
2179:5 2180:2
causal [1] 2035:19
caveat [1] 2179:6
caveats [1] 1976:17
CBC [3] 1956:18,25 1996:9
CBET [19] 2094:21 2095:6,6 2097:
2,6,19 2098:4,9,23,24 2099:8,11,
16,18 2100:14,17 2102:10,15,23
CCG [19] 2018:24 2019:3 2022:10,
12 2048:5 2049:20 2051:21,22
2054:3,5 2063:21 2072:11 2080:
23 2081:8 2120:16 2122:1 2170:
13 2175:23 2177:9
CCG-5-000047 [1] 2153:20
CCG-5-000378 [1] 2164:23
center [1] 2012:17
central [1] 1960:16
certain [7] 1972:3 1994:4 2010:13,

14 2041:5 2090:5 2158:7
certainly [7] 1974:25 1975:23,25
2011:17 2082:16 2090:2 2167:4
CERTIFICATE [1] 2185:1
certify [1] 2185:3
cetera [2] 2101:19 2103:13
CGC-5-00047 [1] 2153:8
chambers [1] 2040:14
change [43] 1975:9,15 1989:7
2034:16 2039:4 2043:22 2046:6,
11,12 2057:6 2060:9 2063:6 2078:
25 2079:1 2081:6 2082:2,10,14
2083:11 2132:19 2141:2,13 2145:
7,16,17 2146:6,6,9 2148:9 2149:3
2164:3 2167:19,22 2168:12,16,20
2169:15 2170:22,23 2171:14
2172:5,6,8
changed [7] 1974:17 1975:19,24
2019:10 2026:16 2082:5 2083:6
changes [17] 1974:23 2023:8
2034:7,10,15,20 2035:25 2036:8,
16 2041:1 2050:24 2055:9 2058:
12 2080:25 2085:7 2131:24 2148:
15
changing [3] 1968:2 2005:17
2082:7
channel [9] 2098:21,22,25,25
2099:1,8,16,18 2117:24
characteristic [1] 2008:12
characterize [1] 1965:1
charge [2] 1963:22 2166:24
chart [5] 2052:9 2086:12 2164:25
2165:2,18
check [1] 2082:6
cheese [2] 1992:11 2004:7
Chicago [2] 1958:18 2161:6
chief [3] 2013:7 2124:20 2125:7
CHO [1] 1953:15
choice [20] 2022:14,15 2023:8
2042:2 2053:1 2058:20 2082:24
2095:10 2098:16 2100:21 2101:
25 2102:1 2103:25 2106:4 2107:6,
7 2108:4 2129:8 2130:23,25
choices [15] 2020:14 2030:7,7,8,
10 2042:9 2045:9 2048:21 2049:2
2083:15 2094:19 2095:3 2108:13,
14,14
choose [2] 2020:15 2035:7
chooses [1] 2107:9
chose [4] 2068:19 2098:14 2134:
15 2137:10
chosen [1] 2035:3
Chris [1] 1996:8
circumstance [1] 2090:20
circumstances [3] 2043:8 2125:
11 2173:13
cite [3] 1986:12 1987:9 2150:9
cited [4] 1994:1 2065:16,25 2165:
14
City [5] 2012:18 2105:3,3,13 2159:
17
CityCenter [1] 1953:18

claim [8] 1963:9 2037:2 2055:13, 19 2064:24 2067:3 2072:10 2178:18
claimant [44] 1962:25 1963:1,9 1978:11 2017:5 2018:2,5,17 2019:16 2021:23 2022:6,22 2024:5,6 2027:12 2028:21 2029:10 2031:14 2032:9 2041:23 2042:3 2045:24 2048:22 2052:2,23 2054:11 2056:24 2063:7,17 2068:22,23 2074:19 2111:8,12 2112:24 2114:1 2115:25 2116:14,18 2119:1,13 2164:4 2167:23 2168:21
Claimants [29] 1952:2,18 1953:13 1954:2,15 1955:2 1956:11,20 1958:12 1970:11 1978:12 1981:4 2000:14 2003:1 2007:9 2012:7 2018:9 2052:18 2063:4 2067:20 2069:5 2071:2,5,8,15 2072:23 2077:6 2089:11 2149:2
Claimants' [5] 1977:13 2006:25 2029:8 2032:12 2060:8
claiming [1] 2055:4
claims [1] 2055:14
clamoring [1] 2162:10
clarify [1] 2003:25
classification [15] 2048:7,9 2049:8,14,17,18 2050:3,4 2051:21,22 2054:4 2060:13 2120:17 2122:1 2177:10
classifications [1] 2085:12
classified [1] 2176:5
clear [8] 1969:9 1972:21 1977:4 2042:17 2046:14 2112:1 2154:21 2181:8
clearer [1] 2147:15
clearly [1] 1986:8
cleave [1] 1998:19
close [6] 2029:1 2063:9 2081:19 2105:2 2165:24 2179:7
closer [1] 2052:3
club [1] 2160:18
co-author [2] 1961:21 1986:18
coefficient [49] 2025:19 2031:7, 16,17 2038:1 2042:15 2043:2,3,12, 18 2044:2,4,11,16 2051:2 2053:18, 18 2055:2,8 2056:1 2057:21 2060:1,4 2110:22,23 2111:4,20,24 2112:23 2113:15,19 2114:3,8,25 2115:10,15 2116:25 2117:3 2118:18 2119:6,16 2123:5 2124:23 2125:12,16 2126:15,17 2127:6 2130:2
coefficients [57] 2024:12,20 2025:1,3,10 2027:18 2028:1 2034:5,11, 18 2035:3,6,9,16,20 2041:17,22 2042:22,25 2043:1 2044:6,14,17 2052:12,25 2054:22 2057:9 2062:17 2069:16,24 2081:2 2084:19,21 2085:19 2086:8 2109:23 2111:17, 18 2112:22 2113:1 2115:6 2120:25 2121:11 2124:4,12 2125:10 2126:9 2127:25 2130:3,9 2170:24

2171:12 2172:8 2179:25 2180:2, 19 2181:12
cognitive [5] 1958:16,17 1959:20 1962:7 1971:20
coherent [2] 1990:21 1997:6
cohesive [2] 2084:9 2158:10
collect [2] 1959:12 1969:20
collected [4] 1965:5 1970:9 1997:15 2159:6
collection [1] 1959:12
collective [5] 2159:2,5,9 2160:8 2162:23
collectivized [3] 2159:11 2160:1, 18
collects [1] 1960:13
College [2] 1958:16 2012:16
column [19] 2027:6,7 2028:5,11, 11,18 2051:20,21 2052:5,6 2054:3 2061:3,3 2078:24 2126:11,12 2177:9 2178:10,10
columns [1] 2029:21
combined [2] 2022:7 2069:18
Comcast [12] 2150:11 2151:8 2153:3 2154:6,8,23 2155:14,24 2156:8,13,15,17
Comcast's [1] 2156:19
come [17] 1973:8 1980:9 1990:11, 17,19 1991:3 2025:2 2029:2 2037:2 2047:14 2092:2 2117:17 2124:10 2138:12 2149:23 2167:24 2175:4
comes [6] 2030:24 2038:9 2082:24 2118:1 2145:2 2176:11
comfortable [1] 2133:19
coming [4] 1985:17 2048:11 2049:2 2183:2
comment [4] 1992:13 2000:20 2010:3 2054:11
comments [2] 1965:8 2042:1
Commercial [6] 1952:18 1977:8 2050:7 2127:11,23 2177:22
Commission [3] 2049:22 2175:25 2176:1
commissioned [2] 1981:4 2013:19
committee [1] 1962:3
common [3] 1996:22 2100:25 2101:1
communication [1] 1983:19
comparable [2] 1965:10 2076:4
compare [3] 1960:3 2079:7 2080:10
compared [6] 1992:1 2059:12 2060:25 2079:4,16 2080:1
comparing [2] 2080:9 2127:11
comparison [5] 1969:25 2008:5 2061:3,4 2090:4
comparisons [1] 2065:12
compensable [11] 2025:16,23 2026:1,3,5,16,17 2028:5,8 2029:22 2171:3
compensate [2] 2116:2 2166:21

compensation [3] 2139:22,24 2140:3
complete [1] 2182:10
completely [3] 2031:5 2043:18 2166:3
completing [2] 2013:18,22
component [2] 1973:12 2147:7
components [1] 2023:20
composite [1] 2157:2
compositions [1] 2160:4
compulsory [14] 1976:8 2017:5 2067:6,15 2137:1,2 2138:21,24 2140:11 2154:17,22 2157:12,16 2163:16
compute [3] 2067:19 2078:16 2113:12
computed [1] 2069:15
computing [1] 2079:3
conceivable [4] 2002:3,5,10,10
concentrated [1] 2174:4
concept [3] 2020:7,10 2072:10
conception [2] 2141:15 2152:23
concern [1] 2006:21
concerned [3] 1959:11,16 1983:13
concerns [6] 1964:1 1967:2,16 1968:10 1970:12 1984:20
conclude [3] 1987:22 1989:16 2018:19
concluded [2] 2066:8 2081:11
conclusion [2] 1970:8 2113:12
concur [3] 1993:14,24 1994:2
conduct [8] 1959:15,23,24 1960:1 1962:11 1963:21 1966:17 2012:25
conducted [6] 1960:1 1963:24 1967:1 1970:3 1973:1 1974:6
confidence [30] 2043:16 2044:12 2045:4 2110:2,11,17 2111:2 2112:8 2114:14,16,20,21 2118:4,10,14, 22 2119:5,11,15,19,24 2170:17 2171:6,8,14,22 2172:11 2174:16 2175:9 2181:1
confident [1] 2114:23
CONFIDENTIAL [1] 2184:17
confine [1] 1979:13
confirm [1] 2072:25
confirming [1] 1972:19
conflicts [1] 1979:2
confusing [1] 1991:25
confusion [1] 1984:18
Congress [3] 1951:2,13 2154:15
Conrad [19] 1956:15 1957:6,17 1958:6,8 1962:15,18,19,22 1977:23 1986:9 1998:6 2002:23 2007:14,21 2010:21 2064:13,14 2184:3
consent [1] 2136:13
consequences [1] 1980:4
consider [5] 2008:22 2094:20 2143:7 2152:18 2164:3
consideration [7] 1989:24 1992:15,22 2009:8 2104:6 2107:7,8

considered [4] 2087:2 2147:4 2160:16 2173:17
considering [3] 2019:13 2138:23 2145:21
consistent [7] 1985:7 2055:4 2072:25 2156:24 2157:1,5,10
constant [6] 1980:13,19 1981:4, 17 2071:19 2132:1
constraining [2] 1995:7,16
construct [1] 2162:17
constructed [1] 2169:18
consulting [2] 1999:14,15
consumes [1] 2114:16
consumption [4] 1968:20,23 1988:9 2004:13
contained [1] 2050:7
contains [3] 1960:18 1961:13 2049:15
content [23] 1965:12 1967:5 1988:22 2031:4,11,20,21,23 2042:1 2049:25 2050:22 2054:12 2062:10 2068:14 2116:9 2127:4 2140:24 2141:11 2144:18 2158:7 2159:15 2167:17 2176:1
content-based [4] 1967:13 1978:23 1981:16 1989:23
contents [2] 1988:19 2153:10
context [13] 1962:12 1988:20 1989:2,19 2024:21 2031:18 2036:3 2046:3 2059:1 2066:6 2077:24 2112:24 2116:6
contexts [1] 2037:3
continuation [1] 1993:13
continue [2] 1975:11 2172:22
Continued [3] 1953:1 1954:1 1955:1
continues [1] 2008:3
Continuing [1] 2095:4
contrast [1] 2061:1
contribute [1] 2115:21
contribution [4] 2025:17 2028:12 2061:23 2062:25
contributions [2] 2025:18 2029:24
control [22] 2024:14,14 2036:9 2081:1 2084:3 2101:8,8,10,14,17 2102:2,5 2103:10,13,23 2120:22 2121:13 2131:4,6,13,17 2139:13
controlling [1] 2131:22
controls [4] 2035:4,8 2104:13,22
convey [1] 2147:21
convinced [1] 2140:14
copy [3] 1987:8 2011:15 2096:4
COPYRIGHT [22] 1951:1 1963:4 2135:23 2136:25 2137:6,11,12,16, 20,25 2138:5 2139:19 2141:20 2143:4 2145:20 2146:7 2148:18 2154:2,14 2158:1,23 2160:11
copyrighted [2] 2160:3,12
Cornell [1] 2012:11
corner [3] 2097:9 2099:3 2151:13
Coronation [1] 1996:8

Corporation [2] 1956:19 2150:12
correct [127] 1961:6,9,14 1978:13,
14 1986:19 1987:20,21 1988:10
1989:14 1990:1 1994:19,19 1996:
9,14 1999:4 2001:20 2005:8 2006:
14 2014:25 2015:20,21 2016:12,
15 2017:16 2018:17 2022:11
2024:25 2025:6,7 2026:9,21 2027:
11,12 2029:11 2041:2,3,18,19
2042:23 2047:22 2054:17,18
2061:12 2067:21,23 2069:6,20
2070:10 2072:4 2073:12 2076:20
2080:24 2083:15 2085:9,10,25
2086:2 2087:18 2092:19 2093:1
2096:13 2097:22,23 2098:5 2099:
9 2100:19,24 2109:7 2110:8,9,14,
19,25 2111:1 2112:5 2114:6,7
2115:7,11 2118:24 2120:13,14,19,
23 2121:24 2122:9,10,12,13,19
2123:2 2124:1,2 2131:4,14 2133:
12 2135:6 2136:2,5,16,25 2137:6,
13,14,14 2138:1,17 2139:9 2149:8
2150:15 2151:7 2152:22 2154:3,
10 2156:22 2159:1 2165:21,22,25
2175:19,20 2178:22,23 2179:1,2
2180:17
corrected [11] 2014:5 2015:13
2051:7 2056:10 2069:22,25 2070:
17 2077:10,21,22 2170:15
correction [4] 2014:17,23 2016:6,
13
corrections [4] 1961:2 2014:15
2015:17 2016:5
correlated [9] 2035:13 2042:12
2092:11,13,14,17,21,24 2130:12
correlation [3] 2089:16 2112:3
2143:19
correspond [2] 1978:22 1979:9
corroborate [1] 2066:12
corroborated [1] 2065:7
corroboration [1] 2065:8
COSENTINO [32] 1954:9 2011:2,4,
13,22 2014:8,9,12 2016:18,24
2019:20,21,23 2028:3 2033:9
2036:19 2040:15,16,17 2053:25
2063:25 2072:18 2073:5,13 2074:
14 2096:18 2100:4 2151:25 2182:
22 2183:5,10 2184:9
cost [26] 2038:15 2047:9 2102:19
2103:18 2104:23 2105:11,21
2106:17,24 2107:2,4,10,14,17,18
2117:13,14 2157:15 2158:3,19,22,
24 2160:19 2161:10 2166:25
2174:15
cost/benefit [1] 2068:20
costs [15] 2030:11 2039:2 2047:7,
10 2104:7 2106:3 2108:16 2150:6
2155:4,18 2156:21 2157:8 2159:
12 2163:7 2166:15
couldn't [2] 2007:5 2067:24
counsel [3] 1993:9 2117:11 2127:
9

counsel's [2] 2143:25 2160:9
counted [1] 1961:18
counterfactual [2] 2092:22 2141:
7
counting [4] 2078:11,13 2130:6,7
country [3] 2049:25 2050:8 2176:
6
counts [1] 2176:4
County [9] 2097:25 2098:14 2099:
21 2100:12,15,20 2102:14,15,23
couple [5] 2030:2 2038:13 2066:
10 2128:15 2179:19
coupled [1] 2072:13
course [7] 1959:24 1995:22 2013:
4 2085:5 2122:17 2142:11 2169:
23
courses [3] 1959:9,10 2013:3
court [2] 2097:13 2185:10
cover [3] 2017:15 2037:8 2133:21
coverage [3] 2046:25 2091:21
2107:25
covered [2] 2013:11 2136:22
covering [7] 2021:7 2090:25 2091:
5,10,14,16,19
covers [1] 2091:8
Covington [1] 1953:17
Crawford [21] 2020:1,12 2021:20
2030:14 2061:4,13 2063:14,20
2085:20 2087:3,7 2130:5 2131:12
2132:14 2135:4,10,12 2175:24
2176:7 2178:25 2181:13
Crawford's [32] 2018:21 2024:23
2026:18 2046:9 2050:5 2054:8
2056:9,13,21,23 2058:3 2059:3,4,
21 2060:10,10,21 2085:17 2102:4
2131:21 2132:18 2133:18 2172:
21,25 2173:4 2174:16 2178:21
2179:4,11 2180:16 2181:6 2182:2
cream [2] 1991:21 1992:2
create [2] 2161:2,7
creates [1] 2139:3
credit [2] 2109:10,10
criteria [4] 2017:8 2035:21,25
2057:8
criterion [3] 1963:4 1993:2,4
criticism [13] 1967:6 1969:1 1979:
20 1981:22 1982:5 2008:7,12
2009:3 2010:5 2018:18 2036:20
2172:20 2175:14
criticisms [15] 1969:7 1979:13
2018:8,11 2032:18 2033:2,4,18,18,
24 2036:17 2040:1 2041:6 2044:
25 2128:16
criticize [2] 1979:15 1996:5
criticized [1] 2175:15
criticizes [1] 2003:6
critique [4] 1963:20,22 1976:4
2008:4
Cross [2] 2064:5 2184:2
Cross-examination [12] 1977:16,
21 2002:17,21 2007:18 2064:9,16,
20 2089:7 2134:2 2150:24 2181:

20
Crowell [1] 1952:22
CRR [1] 1951:23
CRTC [4] 2050:10 2175:16,21
2176:13
CTV [6] 2026:15 2028:8 2087:15
2122:8 2180:15 2182:16
current [3] 2026:18 2135:22 2168:
9
currently [3] 1958:21 1962:1 2012:
15
curve [1] 2025:13
customers [2] 2167:14,15
cut [1] 2058:24
CV [4] 1961:8,18,19 2015:3

D

D.C [9] 1951:16 1952:10,16,24
1953:10,20 1954:6,20 1955:8
dairy [5] 1991:20 1992:3,12 2004:9,
14
dance [1] 2183:18
DANIEL [1] 1952:5
Danielle [2] 1956:20 1957:1
darn [1] 2168:7
data [47] 1959:11,12 1965:1,2,3,5
1969:1,7 1970:9,9 1997:16 2019:
7 2022:16 2048:12 2049:12,13,18,
21 2050:7 2051:7 2052:7 2054:15
2055:12,12,15,20 2056:13,14
2057:12,16 2058:17 2062:15,22
2065:11 2068:7,13,15 2075:18
2112:19 2126:11 2129:15,16
2134:12,15,21 2147:25 2167:8
Date [1] 2185:10
dated [4] 2015:14 2016:2 2061:19
2165:12
DAVID [2] 1951:11 1952:20
day [3] 2079:22 2132:5,12
days [1] 1977:20
de [2] 1956:20 1957:1
de-duplicated [6] 2061:16,19,21
2062:20 2063:5,11
de-duplication [1] 2062:21
de-duplicative [1] 2062:13
Debra [1] 1981:5
decades [1] 1973:7
decided [1] 2019:14
decides [1] 2129:13
decimal [2] 2053:17,22
decimals [2] 2027:25 2126:4
decision [10] 1981:24 1982:3
2037:6,13 2104:1,25 2107:11,12
2116:6 2169:15
decisions [17] 2021:4 2036:10
2037:20,21 2046:12 2049:1 2058:
8 2059:5,7,10 2093:11,12,15 2129:
3 2152:13,15,20
decline [2] 2079:23 2160:7
decrease [2] 1975:21 2080:13
define [1] 2036:3
definitely [1] 2093:16
definition [5] 1991:15 1992:12

2000:7,16 2004:4
definitions [1] 2093:24
definitively [1] 1972:4
degree [3] 1958:15 1971:17 2012:
11
degrees [1] 1972:7
deliberation [1] 2008:18
delivered [2] 2106:6,10
delivering [1] 2105:12
delivery [3] 2103:19 2104:23 2106:
17
demand [17] 2001:13 2021:2,2,3
2025:13 2037:16 2083:14,19
2107:1 2108:2,4 2145:17 2161:16
2168:13,18,22,23
demand-side [1] 2152:20
denote [1] 2027:21
dependent [2] 2023:21 2036:13
Depending [1] 2137:7
depends [5] 1967:20,22 1971:17
1974:20 2004:2
derive [1] 2149:25
describe [3] 1998:22 2109:5 2117:
12
described [3] 2081:20 2135:4
2151:4
describes [1] 2003:11
describing [1] 2126:20
description [3] 1966:23 2023:18
2072:24
design [2] 1959:21 1970:16
designed [1] 1966:17
despite [1] 2059:22
detail [3] 1970:13 1973:10 2176:
20
detailed [1] 2022:17
details [3] 2015:6 2067:8 2164:17
detected [1] 1967:3
DETERMINATION [6] 1951:6
2042:13 2065:16,24 2066:4,8
determine [2] 1963:8 2143:8
determined [1] 2003:13
determining [1] 2065:5
detract [1] 1968:12
develop [1] 1978:18
developed [2] 1975:20 2135:1
developing [3] 1978:17,17 2074:
18
Devotional [20] 1954:15 1955:2
1977:9 2041:17 2042:3 2053:7,9
2069:19 2089:11 2114:5 2123:25
2124:19,22,23 2125:2,16 2126:6,
16 2127:4 2177:25
difference [14] 2044:10 2055:16,
23 2057:3 2058:2 2081:21 2083:
19 2101:21 2108:6,9 2127:21
2163:21 2175:7 2179:9
differences [9] 2022:2 2055:21
2076:1 2081:7,22 2107:21,23,24
2108:10
different [33] 1960:4 1974:23
1995:10 1998:12 2001:10 2019:

13 2023:3 2027:4 2037:12 2043:9 2053:1 2055:6 2057:19,19 2069:3 2075:4,6 2076:3 2079:18,19 2083: 16 2084:19,23 2089:17 2101:11 2132:7 2140:18 2143:15 2163:18 2168:21 2171:7 2173:22 2176:19
differentiated [8] 2031:20 2062:3, 10,16 2140:24 2142:19 2144:18 2148:11
differentiation [1] 2062:7
differently [1] 2042:22
difficult [1] 1989:4
difficulty [1] 1966:14
digested [1] 2075:3
digital [1] 2013:14
dilemma [1] 1975:9
DIMA [1] 1953:7
dimensions [1] 2146:12
DIRECT [36] 1958:4 2011:21 2014: 5 2015:14 2016:1 2023:15 2026: 15,18,23 2061:25 2065:25 2066: 18 2070:18 2071:11 2072:8 2073: 24 2074:25 2075:24 2077:10,17, 21,22 2093:10 2094:9 2115:2,14 2118:5 2134:25 2149:11 2151:20 2152:9 2158:23 2165:15 2170:10 2172:2 2184:2
directly [2] 2028:7 2137:13
director [1] 1959:6
disagree [1] 2159:1
discern [1] 2038:6
discount [1] 2073:10
discovery [1] 2151:11
discuss [6] 2005:18 2018:3 2061: 24 2075:23,23 2101:20
discussed [4] 2054:21 2066:17 2071:13 2106:2
discusses [1] 2131:20
discussion [1] 2018:20
Dismantling [1] 2164:9
disrupt [1] 1975:10
distance [8] 2103:19,23,24 2104: 14,22 2106:7,12,18
distant [126] 1964:4,13 1969:12 1978:10 1992:21,24 2006:2,6,17, 24 2022:18 2024:6,7,9,10 2025:25 2027:13,14,16 2028:9 2030:15 2031:4,6 2034:9 2041:8,14 2046: 8,16 2049:19 2050:15 2053:8 2055:16 2068:6,9,14 2070:21 2076:6,19 2078:5,9,18 2086:13 2089:22,23,25 2094:1,19 2097:10, 21 2098:5,10 2099:22 2100:17 2101:3,15,24 2102:11 2103:7 2106:22 2128:20,22,25 2129:1,3,5, 7,18,21,22 2130:1,1,11,13,16,18, 20,22,23,24 2131:2,13,23 2136:21 2137:21 2138:14 2139:9,17,25 2142:4,14 2143:10 2144:15,15,21, 24 2145:8,9,23 2146:5,13,19 2147: 25 2148:1,4,9 2150:4 2152:12,16, 18 2157:2,14 2158:9 2163:11

2164:6 2166:8,19,22 2167:1,7,12 2168:3,7 2169:1,17 2171:3 2175: 22
distantly [5] 2069:10 2147:2 2159: 4 2161:3 2162:17
distinctiveness [1] 2143:20
distinguish [1] 2116:20
distribute [4] 1969:19 2116:7 2129:9,14
distributed [5] 2017:9,11 2078:21 2101:6,7
distributing [2] 2093:22 2115:22
divide [1] 2121:16
Doctor [1] 1970:24
document [11] 1960:18,21 2014:2, 4,13,16 2015:2,23 2097:1 2165:5 2172:19
documentaries [1] 1990:24
documentary [1] 1990:25
documents [4] 2074:4 2151:3,10, 19
doing [13] 1957:24 2080:4 2084:14 2109:9 2113:3 2117:21,23 2128:7 2141:8 2142:17 2149:2 2161:18 2163:4
dollar [2] 2102:25 2117:14
dollars [1] 2028:2
domestic [1] 2049:25
DOMINIQUE [1] 1953:5
done [19] 1966:19 1975:3 1981:5 1997:15 2008:9 2027:3 2029:14 2043:5 2063:4 2074:20,22 2086: 12 2101:22 2119:20 2125:13,13, 14 2135:7 2175:5
double [2] 2130:6,7
DOVE [1] 1953:14
down [22] 1956:5 1989:21 1994:1 1996:4 2010:23 2031:8 2048:16 2052:15 2056:5 2070:15 2073:22 2085:14 2097:8 2106:15 2110:21, 23 2146:12 2149:23 2150:10 2169:22 2170:2 2183:3
downward [3] 1966:4 1968:22 1970:19
downwards [1] 1968:19
dragging [1] 2031:8
draw [1] 2048:21
dress [1] 1973:3
drive [1] 2160:21
driven [2] 2055:15,22
drives [1] 2055:23
dropping [1] 2039:17
Drs [2] 2019:25 2045:21
DSE [12] 2030:4,16 2038:16,19 2045:16 2096:24 2097:3 2102:19 2174:3,3,3,5
DSEs [1] 2046:25
due [1] 2109:10
duly [2] 1957:18 2011:10
duplicated [1] 2062:15
duplication [1] 2014:21
duplicative [4] 2062:8,12 2116:2

2117:17
during [4] 1957:9 2075:19 2093: 10 2132:16
DUSTIN [1] 1953:15

E

each [21] 2006:2 2021:23 2024:24 2025:16 2027:19 2029:25 2030:1 2042:19 2056:2 2078:24 2079:17 2083:8 2087:17 2101:18 2159:16 2170:18,21 2171:9 2172:12 2175: 3 2181:13
Earlier [6] 1968:25 2050:21 2058: 24 2080:19 2087:1 2134:8
earn [1] 2167:5
easier [2] 1963:20 2027:23
econometric [7] 2043:20 2044:18 2045:13 2058:20 2084:7 2109:19 2131:17
econometrically [1] 2083:25
economic [9] 2013:1,11,12 2033: 21 2034:3,4,6,10 2035:2
economics [9] 2012:12 2013:2,4, 7,8,23 2016:20 2065:10 2170:6
economist [4] 2071:22 2134:11 2141:6 2162:6
economy [1] 1960:14
editor [3] 1961:12,15 2013:6
editorial [3] 1961:23,25 1962:2
education [2] 2012:9 2015:6
educational [5] 1958:14 1965:18 2038:24 2103:12,12
effect [5] 1975:22 1995:16 2048:4 2082:20 2157:12
effective [1] 1968:6
effectively [6] 1995:23 2031:8 2048:25 2051:1 2052:11 2130:12
effects [7] 2046:14 2057:5,11 2058:11 2084:4 2087:11 2174:13
efficiency [2] 2159:3,11
effort [1] 1969:8
eighth [1] 2098:18
either [9] 1961:20 1966:19 1968: 11 1988:3 2085:12 2128:5 2136: 11,12 2139:18
elements [1] 2119:2
eliminated [1] 1991:24
ELMO [3] 2065:19 2076:14 2180: 10
else's [1] 2103:18
emphasis [2] 2062:10,15
emphasize [1] 2166:14
emphasizing [1] 2111:8
empirical [3] 2013:2 2014:19 2105:17
end [12] 1970:6 2021:21 2022:9,9, 11 2063:8 2078:3 2079:12 2115: 16 2128:19 2172:24 2173:24
endeavor [1] 1971:8
engage [1] 1971:5
engaged [1] 2148:7
engineering [2] 2012:11 2106:14
enhance [1] 1968:12

enough [9] 1992:22 1995:23 2114: 23 2116:2,14 2133:2 2147:11 2162:21 2176:8
ensure [2] 2109:13 2140:3
enter [2] 2103:4,13
enterprises [1] 2161:17
entire [5] 2029:12 2095:10 2100: 22 2119:8 2124:4
entirely [2] 1965:10 1976:15
entitled [5] 2007:9 2067:3 2074:5 2098:19 2124:6
environment [1] 2019:10
equal [1] 2144:6
equate [1] 2092:4
equation [1] 2107:20
Erdem [14] 2018:12 2032:22 2033: 4,25 2034:8,21,22 2040:4,25 2042: 16,21 2045:22 2054:21 2128:24
Erdem's [5] 2036:8 2040:22,24 2128:16,21
error [7] 2037:25,25 2039:11 2110: 8,18 2125:14 2173:20
errors [13] 2049:17 2059:13 2118: 20 2121:17,25 2170:25 2171:23, 24 2172:1,7 2173:2 2174:7,17
ERVIN [1] 1952:20
especially [5] 1988:11 2005:1 2045:16 2059:18,18
ESQ [24] 1952:3,4,5,6,7,13,19,20, 21 1953:3,4,5,6,7,14,15,16 1954:3, 9,16,17 1955:3,4,5
essence [1] 2120:21
essential [1] 2062:23
estimate [55] 2018:1 2021:2,3 2022:5,21 2023:19 2024:25 2028: 13 2029:3,7,9 2030:9 2035:2,15 2037:16,25 2038:10 2039:9 2041: 21,22 2042:9,15 2045:1 2047:13 2049:12 2052:1,4,11,23 2053:20, 21 2054:14 2056:24 2068:9 2076: 13 2082:25 2089:16 2111:23 2112:7,10,19 2113:25 2117:1,6 2118:24 2119:19 2123:3,5 2125:9 2167:24 2172:14 2175:4 2178:13 2181:4,6
estimated [20] 2018:16 2023:5 2027:19,23 2032:5 2043:2,3,15 2044:7 2051:1 2060:4 2068:10 2076:7,19 2110:5 2120:24 2124: 12 2125:10 2173:1 2174:19
estimates [20] 1964:10 1968:22 2010:12 2032:11 2045:4 2050:18 2052:15 2054:4 2059:12 2062:9 2063:20 2087:7 2112:21 2118:11 2124:11 2128:7 2171:10,11 2172: 13 2173:7
estimating [18] 2019:15 2024:3, 16 2028:15 2031:2 2034:3,12 2036:5,6 2053:11 2057:9 2059:16 2065:2 2068:21 2074:18 2103:1 2119:12 2131:24
estimation [1] 2061:23

et [2] 2101:19 2103:12
evaluate [3] 1977:11 1980:20 2001:4
evaluating [4] 1976:23 2035:25 2048:16 2143:2
evaluation [1] 1994:15
evaluations [2] 1979:16 1997:15
even [27] 1964:20 1974:21,25 1987:23 1995:20 2000:2 2001:12 2005:4,5 2007:6 2039:2 2043:10 2047:10 2053:19 2085:7 2090:22 2110:11 2111:19,21 2113:22 2115:9 2119:23 2143:12 2161:11 2169:13 2174:1 2181:7
event [1] 2043:21
eventual [1] 2154:16
everybody [2] 2132:4 2133:3
everyone [2] 2002:17 2177:24
everything [3] 2042:8 2095:19 2162:4
evidence [17] 1960:20 1969:11 1979:6 1987:16 2046:17 2072:21 2073:4 2076:16 2096:22 2100:7 2105:5 2144:17 2152:4 2157:17 2162:9 2163:1 2166:12
exacerbate [1] 1997:21
exact [2] 1974:10 2049:11
exactly [7] 1966:18,25 2039:10 2058:23 2079:20 2165:2 2168:5
EXAMINATION [3] 1958:4 2011: 21 2182:20
examined [3] 1957:18 1963:18 2011:10
example [53] 1967:8 1968:14,15, 16 1970:17 1971:10,19 1979:19 1988:14,17,19 1989:2,10,16,17 1990:16,25 1991:9,16 1992:3,6,7, 8,25 1993:3 1995:15 2003:25 2004:3,3,5,6,7,11 2008:5 2024:23 2034:8 2036:5 2041:8 2069:7 2079:21 2091:6 2094:17,20,21,23 2095:4,15,18 2108:5 2118:23 2131:1,3 2133:11
examples [77] 1967:5,6,7,10,14, 18,25 1968:3,5,8,11 1971:10,12 1975:8 1979:20,21,24 1980:2,3,5 1987:19,24 1988:5,11,12,24 1989: 11,11,19,22 1990:4,18 1991:4,8, 13,19 1992:14,23,23 1993:25 1994:3,6,10,14,18,20 1995:3,6,8, 16,25 1996:5,6,18,19,20 1997:2,4, 6,9,13 1998:2 1999:22,25 2000:5, 13,23,24,25 2001:24 2003:4,8,12, 17,21,22 2005:12
excellent [1] 1971:17
except [1] 2121:14
exception [3] 1992:9,11 2094:3
exceptions [3] 1991:13,23,24
excess [1] 2044:21
exclude [3] 1981:24 1982:6,9
excludes [1] 1994:4
excuse [9] 1962:17 1983:25 1998:

5 2027:20 2036:2 2053:3 2117:11 2157:22 2165:4
excused [3] 2010:21 2064:4 2182: 25
executives [2] 1999:3 2001:19
exercise [1] 2001:17
exhaustive [4] 1995:22 2001:1,2, 15
Exhibit [60] 1960:19,25 1961:3,8 1980:12 1986:11,25 1987:2,12,15 2014:2 2015:10,15,18,23 2016:5 2023:16 2026:20,24 2051:13 2060:19 2066:18 2069:23 2072:8 2076:17 2094:9 2096:1,8,16,21 2097:18 2098:18 2099:24 2100:1, 3,6 2108:22 2115:3 2118:5 2120: 3 2128:18 2134:25 2149:12,20 2150:19,24 2151:16 2152:3 2153: 2,5,7,15 2164:20 2165:10,16 2170: 11 2172:2,18 2177:1 2184:20
Exhibits [2] 2151:2 2152:8
exist [2] 2149:6 2168:5
expand [1] 2047:5
expect [5] 2104:5 2105:2,13 2106: 16,19
expectations [1] 2109:14
expected [1] 2109:20
expenditures [1] 2070:22
expenses [1] 2068:24
expensive [2] 2162:19,20
experience [2] 2015:7 2016:20
experimenter [1] 1971:22
experiments [1] 1960:3
expert [7] 1962:15 1990:23 2016: 19 2069:12 2071:23 2081:25 2176:19
expertise [2] 1962:5 2007:12
experts [5] 1999:7,9,11 2008:9 2019:8
explain [23] 1982:4,5,8 2017:1 2018:10,12 2019:2 2020:9,21 2022:1 2023:17 2026:11 2030:5, 22 2033:22 2049:9 2052:8 2058:2 2078:8 2090:13 2127:20 2134:10 2173:3
explained [1] 1995:23
explaining [1] 2043:12
explicit [1] 2104:10
exploitation [4] 2137:4 2138:14 2139:24 2145:23
exploited [1] 2138:11
exploring [1] 1976:22
exposed [1] 2078:15
expressing [1] 1977:5
extending [1] 2095:6
extent [10] 1975:19 1979:11 1981: 9 1984:12 1995:9 2041:5 2084:10 2148:25 2167:11 2169:10
extra [1] 2045:2
extract [1] 2182:9
extremely [3] 1991:22 1992:8 2042:4

eyeballs [1] 2147:12

F

F-r-e-d-e-r-i-c-k [1] 1958:9
face [1] 2179:9
face-to-face [1] 2008:14
faced [1] 1975:8
facilitate [1] 1990:3
facing [2] 2038:15 2039:1
fact [14] 1983:15 1985:22 2055:21 2083:18 2093:3,7 2096:11 2100: 25 2121:8,11 2128:8 2131:9 2144: 1 2157:6
factor [3] 2032:4 2103:25 2105:21
factors [2] 2023:2 2168:17
factual [1] 2093:20
faculty [2] 1959:3 2012:17
failure [1] 2175:15
fall [7] 1964:1 2000:14,24 2024:1 2034:21,25 2157:20
familiar [3] 1983:10 2020:3,5
fan [4] 2077:7 2134:9,10 2144:23
FAPR [1] 1951:23
far [4] 1966:18 1968:8 2107:10 2176:12
faster [3] 2078:1 2153:11,18
FCC [1] 2154:15
FCC's [1] 2099:25
feasible [2] 2001:13,18
feature [2] 1996:12 2139:6
FEDER [10] 1951:10 1974:15 1975: 14,17 1976:3,25 2011:18 2027:20 2036:2 2064:5
federal [2] 1966:16 1971:19
fee [19] 2023:22 2037:11 2038:20 2039:13 2044:21 2045:1 2046:4 2047:2,10 2070:19 2071:17 2072: 17 2073:1 2074:1,5 2075:2 2137: 3 2138:10 2175:7
fee-based [2] 2089:13 2103:17
feel [3] 2068:25 2078:13 2162:2
fees [29] 2038:5,11 2039:5,8 2046: 22 2071:18 2072:2 2073:9 2075:9, 19 2076:5,11,18 2089:18 2095:1 2107:13,22 2108:12 2112:4 2132: 20,20 2137:5 2157:16 2169:3 2172:22,22 2173:13 2174:2,5
fellow [1] 1958:19
felt [1] 1969:25
fencing [1] 1989:6
few [5] 1969:14 2040:13 2042:11 2147:5 2149:23
field [1] 2016:20
figure [4] 2117:13 2142:11 2160: 24 2163:1
figures [2] 2078:25 2079:3
film [1] 1990:24
final [7] 1966:8 2008:2 2029:2,7 2032:7,11 2076:12
finally [3] 2015:22 2018:19 2123: 25
find [7] 1971:6 1997:22 2039:3 2094:11 2118:10 2148:3 2162:2

fine [2] 2037:23 2038:11
finish [1] 2074:9
firms [4] 2037:11 2039:11 2161:17 2173:13
first [43] 1956:15 1957:18 1961:20 1963:19 1964:2 1976:3 1982:11 1985:21 1987:24 1993:12 2011: 10 2017:21,25 2018:4 2023:20 2027:6 2028:15 2034:13 2038:13 2046:21 2048:11,13,14 2051:17 2052:5 2053:14 2064:15 2078:8 2081:5 2082:11,12,14,25 2094:24 2098:25 2112:12,13,16,17 2141: 19 2149:13,17 2180:2
fit [1] 2109:14
five [2] 1964:2 2013:21
fixed [7] 2057:11 2058:11 2087:10 2156:25 2157:5,10 2174:12
flashback [1] 2064:13
flawed [1] 2055:20
flip [3] 1986:24 1996:11 2151:17
Floor [1] 1953:9
focus [10] 1979:18 2022:25 2030:9 2081:14 2093:23 2094:10 2128: 19 2140:19 2152:19 2180:18
focused [1] 2146:3
focuses [1] 2058:11
focusing [3] 2069:1 2081:5 2097: 15
follow [2] 1972:7 2029:18
follow-up [3] 1977:2 1991:23 2159:24
follow-ups [1] 2179:19
followed [1] 2136:17
follows [2] 1957:19 2011:11
food [2] 1968:21 1988:8
footing [2] 2035:5 2101:13
footnote [12] 1986:12 2016:7 2066:1,2 2150:8,9 2151:4,20 2165:1,15 2172:19,24
foregoing [1] 2185:3
foremost [1] 2034:13
forgotten [1] 1988:3
form [8] 1981:12 2005:25 2006:5 2030:4,13 2098:19 2150:10 2153: 2
format [3] 2001:10 2065:22,23
formula [1] 2137:10
found [9] 1988:10 2050:11 2070:9 2077:5 2085:8,20,23 2086:16 2087:17
four [9] 1964:2,6 2027:10 2029:11, 12,22 2054:4,15 2087:21
four-year [1] 2029:25
fourth [1] 2047:18
fraction [2] 2039:4 2119:7
fractionalized [1] 2160:6
framework [11] 2024:16 2034:4 2082:24 2083:14 2084:2,9 2086:7 2093:17 2143:1,6 2162:6
Frankel [2] 1985:5,13
Frankel's [1] 1983:2

Frederick [5] 1956:15 1957:6,17
   1958:8 2184:3
free [5] 2036:25 2037:19,20 2067:
   11 2167:1
Freitas [2] 1956:20 1957:1
frequency [4] 1968:15 1980:7
   1999:18 2004:13
Friends [1] 2160:15
frolic [1] 2160:23
front [5] 1960:17 2014:1 2017:14
   2173:6 2178:12
fronts [1] 2140:18
frozen [2] 1991:20 1992:1
full [8] 1958:7 2038:16 2046:5
   2078:14 2087:13 2165:7,12 2182:
   16
fully [1] 2057:2
function [2] 2130:24 2159:5
functionally [3] 2129:6 2130:14,
   15
functions [1] 2042:19
fundamental [2] 1998:19 2083:19
funding [1] 2116:13
FUNDS [2] 1951:7 2115:23
further [21] 1970:21 1994:1 2002:
   14 2007:15,17 2044:5 2064:1
   2088:1 2133:25 2136:23 2137:4
   2138:11,14 2139:24 2145:22
   2164:15,16 2179:16 2181:18,19
   2182:24

G

G-e-o-r-g-e [1] 2012:3
GAO [1] 2154:14
GARRETT [2] 1952:3 2183:13
GASANBEKOVA [1] 1953:6
Gaston [1] 1954:10
gave [1] 1985:5
gears [1] 2005:17
general [26] 1972:18 1984:20
   1994:11,12,21 1995:11 2003:16
   2005:2 2008:11,13,14 2010:3,4
   2013:15 2018:8 2032:18 2034:15
   2036:17,20 2041:6 2044:24,24
   2073:7 2083:24 2084:5 2173:7
generally [10] 1972:5,13 1994:2,8
   2004:15,20 2005:7 2061:20 2092:
   11 2154:16
generate [2] 2147:7,9
generated [6] 2071:18 2072:2
   2073:9 2075:9,19 2076:6
generation [7] 2070:20 2071:17
   2072:17 2073:1 2074:1,6 2075:2
Geoff [8] 2065:20 2070:16 2072:5
   2073:22 2076:15 2085:15 2087:
   16 2180:10
Geographic [9] 2107:21,23,23,24
   2108:6,9,10 2120:22 2121:13
George [34] 1958:8 2011:5,6,9,18
   2012:2 2013:25 2015:9,22 2016:
   19,23,25 2017:13 2018:23 2019:
   24 2033:10 2040:18 2054:1 2063:
   13 2064:4,22 2073:7 2087:25

2089:9 2134:4,8,24 2151:10 2155:
   8 2170:9 2179:24 2181:25 2182:
   25 2184:8
George's [1] 2165:15
gets [4] 1985:20 2069:9 2132:5,11
getting [3] 2046:23 2145:13 2147:
   5
give [18] 1961:16 2007:5 2008:21
   2011:14 2017:22 2024:15 2025:9
   2055:25 2065:19 2076:14 2077:
   25 2078:12,14 2094:23 2109:10
   2113:5 2150:18 2180:10
given [11] 1975:17 1984:11 1988:
   11 2001:24 2009:3,15 2102:10
   2133:22 2144:1 2152:16 2166:4
gives [7] 2021:17 2025:4,20 2052:
   20 2095:20 2101:12 2132:7
giving [1] 2059:10
goal [4] 2020:21 2035:19 2075:25
   2095:19
got [20] 2035:1 2038:18 2039:17
   2055:17 2063:10 2070:8 2075:10
   2078:4,4,4 2082:10,13 2090:8
   2106:20 2120:10 2149:21 2150:
   25 2153:21 2154:19 2160:20
gotten [2] 2079:18 2084:25
graduate [2] 1959:4 2012:17
Graeme [1] 1957:3
grass [1] 2133:18
Gray [14] 2018:12 2032:24,25 2033:
   25 2040:5 2043:23 2044:4,19
   2045:7,21,21 2054:21 2173:12
   2176:13
Gray's [2] 2040:22 2176:18
greater [1] 2030:16
greatest [1] 2087:17
green [3] 1957:23 1986:21 2150:
   17
GREGORY [1] 1953:3
ground [1] 2017:15
grounded [1] 2033:21
Group [30] 1954:2 1956:20 1958:
   12 1960:12 1965:11,21 1970:11
   2000:14 2012:7 2021:6,23 2037:8
   2038:22,24 2046:8 2058:5 2063:4,
   17 2068:23 2091:7 2093:23 2097:
   24 2098:3 2100:18 2102:11 2131:
   22 2173:8,14,23 2174:13
groups [20] 1962:25 1963:1,9
   1966:17 2046:16 2057:15,24,24
   2058:7 2059:7 2068:2 2097:20,21
   2098:11,22 2099:13,15 2101:2
   2137:8 2173:18
guarantee [1] 2133:5
guess [17] 1970:13 1972:21 1976:
   22 1992:13 2064:17 2091:4 2094:
   3 2142:7 2144:8 2149:4 2156:9
   2163:10,24 2164:14 2170:8 2173:
   12 2183:19
guest [1] 1956:17
guests [1] 1956:24
guys [1] 1957:24

H

half [9] 2021:8 2029:5 2059:9 2090:
   25 2091:5,8,14,16 2129:18
Hampshire [1] 1958:16
hand [5] 1957:15 1980:14 1981:13
   2050:6 2128:4
handle [2] 1985:18 2054:22
hands-off [1] 1971:23
happen [6] 1970:5 2082:7 2094:24
   2140:1 2141:8 2158:14
happened [3] 1970:4 2063:2 2084:
   22
happens [2] 2140:12 2173:19
happy [1] 2040:12
hard [6] 1965:25 1966:1 1989:9
   1998:1 2134:14 2146:15
harmful [2] 1997:20 2003:18
hats [1] 1959:2
head [2] 1974:11 2080:5
hear [3] 1972:16 2074:8 2158:21
heard [2] 1988:23 2014:11
Hearing [5] 1962:17,18 1987:13
   2016:22 2150:23
help [17] 1967:19 1988:6,24 1989:
   11,11 1990:14,15 1997:23,24
   1998:2 1999:22 2000:21 2003:25
   2017:18 2026:24 2109:13 2116:
   19
helpful [14] 1971:12,12 1988:12,
   17,20 1989:2,20 1991:1,7 1997:17,
   18,19 2000:23 2033:15
helping [2] 1968:6 1995:8
Hi [2] 1977:25 2134:7
high [6] 1959:13 2116:1,14 2157:
   16,18 2163:17
high-level [4] 1992:13 2018:8
   2033:24 2044:25
higher [15] 2031:15,23 2054:10
   2062:18 2063:9 2090:6,17,19
   2092:5 2140:24,25 2145:3 2148:
   12 2166:24 2179:9
highest [5] 2070:9 2085:8,24 2086:
   1,17
history [2] 2031:19 2103:24
hits [1] 2093:25
hitting [1] 2095:22
Hold [1] 2149:19
holding [1] 2132:1
holds [1] 2095:25
hole [1] 2154:19
HOLMES [1] 1953:4
Honor [27] 1987:11 2002:20 2011:
   13 2014:9 2016:19 2019:17 2040:
   16 2063:25 2064:6,18 2072:18
   2073:13,24 2074:10,15 2088:4
   2089:6 2096:15,19 2100:2 2155:
   19 2156:5 2165:8 2179:18 2182:
   23 2183:1,5
HONORABLE [3] 1951:9,10,11
hooked [1] 1956:8
hope [1] 2150:17
Horowitz [20] 1963:14 1964:7

1966:19 1967:4,17 1968:9 1969:2
   1970:10 1978:4,9 1980:5 1981:19
   1982:23 1983:6 1992:5 1996:5
   2003:4,7,12 2005:19
hour [1] 2088:7
hours [2] 2132:5,11
However [3] 2062:24 2128:21
   2129:2
Hunter [4] 2012:16,23 2013:16,24
HUNZIKER [1] 1953:16
hurt [1] 1967:19
hypothesis [5] 2111:21,25 2112:
   14,15 2117:25
hypothetical [28] 2031:12 2135:3,
   18 2139:14 2140:5,7,10 2141:21
   2143:25 2144:2 2145:15,19 2148:
   15,23 2157:23 2158:11 2159:7
   2160:11,24 2161:20 2163:2,9,13
   2166:1 2168:2,5,11 2169:18

I

IAB [3] 2151:14 2165:6,11
IAIN [1] 1952:13
ice [1] 1991:21
idea [3] 1990:21 2038:14 2095:23
identical [1] 1975:1
identify [2] 1960:21 1966:12
identifying [1] 2083:9
illustrate [1] 2095:20
illustrating [1] 2166:25
imagine [1] 2141:3
immediately [1] 1960:9
impact [4] 1967:21 1997:16 2152:
   13 2154:18
impacts [1] 2083:14
impeccable [1] 2088:6
imperfect [1] 1975:12
implementation [1] 1980:25
implicit [2] 2025:12,13
imply [3] 2127:3,5 2173:2
import [1] 2105:25
important [21] 1975:2 2003:21
   2023:7,20 2024:2 2028:14 2034:2
   2046:21 2055:13 2062:7 2091:12
   2102:2,6 2109:11 2112:23 2140:
   12 2143:17,22 2144:7 2145:11
   2166:13
impose [1] 2150:6
impossible [1] 2038:6
imprecise [3] 2121:19,22 2124:11
imprecision [1] 2175:2
impression [1] 2056:20
improve [2] 1987:24 2074:23
improves [1] 2059:11
imputation [1] 1976:16
impute [1] 1976:11
imputed [1] 1965:4
imputing [1] 1976:4
in-depth [1] 1973:10
in-review [1] 1973:3
inaccuracy [1] 2010:14
inappropriate [3] 1994:3 2009:3,
   4

Inc [1] 2096:13
incentive [1] 2160:2
include [17] 1988:1,4 2000:8 2030:
12,12,15 2037:13,14 2122:20
2123:1,6,9 2180:12 2181:25 2182:
7,12,15
included [8] 1982:15 1994:5 2084:
3 2093:16 2122:18 2128:24 2182:
17,18
includes [4] 2015:2 2054:6 2114:5
2176:6
including [3] 1969:3 2120:17
2131:1
inconsistent [1] 1982:13
incorporated [1] 2113:6
incorrect [9] 2003:7,13,24 2004:3,
11 2005:12 2018:10 2050:15
2051:7
increase [15] 1975:21 2062:5
2080:8 2106:17 2142:21,21 2155:
3,17 2156:21 2167:3 2169:24
2170:1 2177:11,13,17
increased [5] 2047:12 2080:3
2081:16 2147:10 2166:4
increases [3] 2001:13 2060:8
2178:24
increasing [3] 2150:3 2165:21
2166:4
incremental [10] 2038:15 2039:1
2047:7,8,9 2063:6 2107:17,18
2108:15,16
independence [1] 1951:15
independent [6] 1972:17 2023:25
2036:13 2101:19 2129:4 2135:8
indicate [2] 1980:3 2180:24
indicated [2] 1975:17 1998:7
indicating [1] 2150:21
indicator [9] 2014:20 2060:2 2063:
16 2083:8 2092:8 2120:19 2122:
18 2123:1,6
individual [4] 2140:19 2157:25
2162:22,24
individuals [1] 2140:18
industrial [2] 2013:3 2016:21
industry [8] 1973:20,20 1999:7,8,
10 2001:19 2150:13 2166:5
infer [5] 2020:13 2021:12,14 2095:
11 2103:2
inference [7] 2020:18 2035:19
2048:21 2057:18,20 2058:11
2134:12
inferring [3] 2030:6 2103:21,21
inform [1] 2095:3
information [30] 1959:21 1960:14
1978:9 2005:7 2013:7 2021:17
2022:20 2025:5 2028:7 2037:5,10
2042:7 2045:15 2046:23 2047:9,
12 2050:8 2057:13 2058:13,18
2059:2 2068:6,15 2084:1 2095:21
2109:12 2171:2 2173:10 2176:6,9
informed [1] 2136:4
initial [4] 2026:4 2061:15,18 2142:

11
inputs [1] 2109:6
insert [1] 2139:8
inserting [1] 2139:17
inside [12] 2051:2 2052:12,19
2053:7 2056:1 2060:4 2083:19,23
2084:19 2108:5 2120:25 2127:10
insightful [1] 2061:22
insignificance [2] 2123:10 2124:
9
insignificant [12] 2110:25 2113:2,
11,14,18,23 2115:11 2121:14,24
2122:9,12 2124:1
instance [7] 1989:10 1990:23
1992:2 2039:6 2102:8,13,22
instances [12] 1965:22,25 1967:
23 1968:24 1980:7 1988:5 1990:
10,22 1991:2 1992:19 1994:4
2000:17
instead [1] 2181:2
institute [1] 1958:23
institutional [2] 2019:10 2140:15
institutions [3] 2048:18 2057:17
2112:18
instructive [1] 1976:20
instructor [1] 1959:3
instrument [1] 1974:16
intellectual [1] 2013:14
intend [1] 1979:15
intended [1] 1969:10
intensity [1] 2145:12
intent [1] 2127:25
intentional [1] 2123:19
interact [1] 2083:7
interacted [2] 2060:1 2081:1
interaction [3] 2084:1,8 2120:17
interactive [1] 2150:13
interest [6] 2035:3 2112:22,23
2119:16 2131:18 2158:5
interested [1] 2034:11
interesting [1] 2168:15
intermediary [1] 2163:22
international [1] 2040:13
Internet [1] 2165:11
interpret [13] 1989:5 2024:13
2032:4 2035:8 2044:12 2111:5
2113:1,13,14 2130:2,10 2174:8,9
interpretation [16] 1974:22 1983:
14 1994:13 2034:7,10,15,17 2041:
10 2086:9 2124:3 2130:9 2131:18
2132:7,19 2133:8,12
interpreted [3] 1969:10 2025:11
2028:1
interpreting [4] 1966:13,22 2111:
4 2114:24
interpretive [1] 2132:2
interrupting [1] 2009:20
interval [18] 2044:12 2110:3,11,17
2112:8 2114:14,16,20 2118:5,10,
14,22 2119:5,11,15,19,24 2181:2
intervals [12] 2043:16 2045:4
2111:2 2170:17 2171:6,9,14,23

2172:9,12 2174:16 2175:10
interview [1] 2002:8
interviewer [3] 1971:22 1972:5
2001:25
interviewers [2] 1972:6 2004:21
interviewing [1] 1971:21
interviews [6] 1973:8,10 2008:4,8,
13,14
intrinsic [1] 2168:12
introduce [2] 1970:16,18
introduces [1] 2010:13
intuition [6] 1993:15,24 1994:2,8,
9,21
invalid [1] 1985:16
involve [2] 1967:10 2081:9
involves [1] 2134:21
irrational [1] 1985:16
ischemia [1] 2064:14
isn't [15] 1989:20 2031:17 2038:17
2054:25 2095:22 2100:15 2101:1,
1 2109:13 2112:12,13 2119:8
2121:5 2124:6 2166:11
Israel [21] 2019:25 2020:12 2030:
14 2047:19,20 2049:15 2050:6
2054:16,22,24 2055:11,14 2057:
25 2063:15 2081:9 2083:22 2085:
7 2129:16 2175:14,15 2178:16
Israel's [23] 2018:16 2021:21 2048:
19 2050:16 2051:25 2053:12
2059:25 2080:17 2082:8,18 2083:
4,7 2102:3 2120:4,12,22 2125:21
2176:9 2177:4,7 2178:4 2180:7
2182:4
issue [13] 1970:7 1992:17 1995:1,
5 2048:7,8,9 2049:7,8 2054:20
2127:17,19 2132:11
issues [4] 1970:16 1992:16 2048:
6 2175:14
items [2] 1988:1 2160:3
iteration [2] 1974:17,21
itself [3] 2147:13 2163:9 2182:8
IX [1] 1951:20

J

Janice [2] 1956:20 1957:1
jargon [1] 2143:20
JESSE [1] 1951:10
JESSICA [1] 1955:5
job [1] 2043:11
JOHN [1] 1952:19
Joint [10] 1952:2 2003:1 2024:6
2027:13 2031:13 2041:23 2064:
23 2079:23 2116:17,22
Jonda [3] 2075:22 2076:5,15
journal [5] 1961:25,25 2013:7,9,10
journals [5] 1961:12,14,17,22,23
Jr [3] 1952:19 1953:14,16
JSC [25] 2016:10 2051:20 2054:6
2069:10,17 2070:10 2080:2 2081:
14,16 2085:8,24 2086:1,16 2087:8,
18 2118:23 2119:5,11,13,24 2126:
11,23 2128:8 2182:11,16
JUDGE [143] 1956:3,13,22 1957:4,

7,20 1958:1 1962:17 1970:23
1971:1,3,4,14 1972:11,12,24 1973:
15,16 1974:7,14,15 1975:13,14,16,
17 1976:2,3,25 1977:15,18 1983:
25 1984:12,24 1985:12,23 1987:2,
6,13 1993:8,11,19,21 1994:16,24
1995:4,11,14 1996:2 1998:5,23
2002:16 2007:17,19,20,21 2008:1,
25 2009:12,20,23 2010:1,8,16,17,
20,25 2011:6,12,15,17,18 2014:7,
10 2016:22 2019:19 2027:20
2033:8 2036:2 2040:7,11 2053:3,
6,24 2064:2,5,7,11,19 2073:2,17
2074:7,11 2077:16 2088:2,5 2089:
3 2096:3,6,20 2100:5 2117:11
2118:2 2123:8,18,23 2124:20
2125:7 2127:8,16,20 2133:2 2140:
5 2143:24 2146:23 2147:17 2152:
1 2153:4,17,21 2155:8,12,22 2156:
1,12 2157:22 2158:17 2159:23
2161:19 2162:11 2164:18 2165:4,
13 2179:21 2181:19,22 2182:20,
24 2183:2,4,8,11,16,17
JUDGES [4] 1951:1 2066:8 2067:
24 2137:25
Judges' [4] 1982:3 2040:14 2065:
16,23
judgment [1] 2119:21
judgments [1] 1969:21
jump [1] 2056:4

K

Karen [2] 1951:23 2185:9
Kaye [1] 1952:8
keep [5] 2034:2 2035:14 2084:8
2127:25 2144:25
keeping [1] 2132:6
keeps [2] 1985:17 2166:23
KENDALL [1] 1954:3
key [1] 2018:4
kids' [1] 1967:11
KIENTZLE [1] 1952:6
kind [32] 1959:1 1969:22 1972:22
1973:4 1974:12 1982:13 1986:25
1989:1 1991:14 2034:14 2041:4
2042:17 2051:3 2058:19 2065:12
2074:17 2084:6 2105:22 2109:12
2114:20 2116:10,19 2132:6 2138:
25 2141:6 2142:25 2145:13 2158:
3 2163:22 2167:24 2174:24 2182:
9
knowledge [1] 1999:11
known [1] 2075:2
Knupp [1] 1953:8

L

L-i-s-a [1] 2012:2
LAANE [21] 1952:4 2064:16,17,21,
23 2072:22 2073:6,22 2074:8,10
2075:5 2077:20 2088:2,3 2155:19
2156:11 2179:18,23 2181:17
2184:11,14
lab [1] 1973:8

labeled [2] 2078:25 2079:22
Labor [2] 1960:11,13
lack [2] 1979:21 2068:13
language [2] 1966:22 2060:3
large [4] 2044:13 2050:13 2121:25 2144:11
largely [1] 1981:2
larger [10] 2090:13,16 2091:1,15, 15 2092:1,3,4 2116:8 2174:8
Larson [1] 1954:10
last [9] 1973:6 1986:15 2029:6 2032:12 2056:5 2097:17 2105:18 2154:11,23
later [4] 1975:1 1996:4 2023:6 2047:15
latter [2] 1965:20 1985:20
Laughter [6] 1958:2 1978:19 2064: 10 2104:17 2133:4 2183:15
law [3] 2046:7 2067:9,10
lawyer [1] 2104:16
leading [1] 2033:6
leads [3] 1966:2 2031:22 2146:24
leap [1] 2124:8
learn [3] 2036:24 2039:5 2045:18
learned [2] 2026:1 2094:18
least [7] 1976:20,22 1990:4 2000:6 2066:11 2102:18 2144:2
leave [1] 2110:10
leaves [1] 2166:17
leaving [1] 2013:24
led [1] 2126:17
left [2] 1988:2 2080:15
left-hand [2] 2097:9 2126:11
leftover [1] 2113:4
legal [5] 2072:20 2073:15,19,19,23
legitimate [1] 2005:4
length [2] 2061:25 2131:20
less [16] 1978:25 1983:18 1984:15 2008:12 2043:13 2045:4,5 2081: 24 2089:24 2095:13 2110:18 2126:25 2173:1 2178:13,15 2180: 24
level [8] 2046:8 2049:10 2053:22 2058:1 2110:4 2131:23 2172:23 2174:13
levels [2] 2009:15 2128:7
leverage [1] 1974:12
levying [1] 2008:7
Library [2] 1951:2,13
license [28] 1976:8 2017:5 2067:3, 6,15 2135:20,23,24 2136:1 2137:1, 2 2138:8,21,24 2139:15,20 2140: 11 2141:22,24 2142:4 2154:9 2155:1,15 2156:9,18 2157:12,16 2163:16
licensed [2] 2148:24 2163:18
licenses [2] 2154:17,22
licensing [3] 2139:22 2145:22 2160:6
lies [2] 2063:19 2083:9
life-style [1] 1967:11
likely [12] 1990:16 1998:2 2008:18

2009:18,24 2010:7 2105:3,8,25 2140:16 2147:9 2163:12
limitation [2] 2049:4 2174:12
limited [2] 2022:16 2180:3
limits [1] 2163:16
line [3] 2052:3 2056:2 2072:19
line-ups [1] 2098:22
linear [1] 2036:7
lineup [8] 2094:25 2098:25,25 2099:1,8,16,18 2161:2
lineups [1] 2098:21 .
linked [3] 2058:4 2159:16,21
Lisa [4] 2011:5,9 2012:2 2184:8
list [7] 1995:19 2000:21 2001:2 2005:22,25 2099:25 2170:20
listed [2] 2127:13 2170:19
listing [1] 1995:15
listings [3] 1999:16,22 2001:16
lists [1] 1961:11
literature [6] 1967:18 1968:18 1998:7 2062:1 2074:21 2105:19
little [19] 1981:22 2023:6 2027:22 2039:21 2043:9 2047:14 2065:9 2066:16 2080:16 2097:5 2110:17 2145:13 2152:12 2156:2 2163:4 2173:25 2175:11 2181:7,7
LLP [8] 1952:8,14,22 1953:8,17 1954:10,18 1955:6
local [28] 2094:5 2100:14,14,24 2101:7,12,23 2102:10 2105:24 2136:1,7,11 2138:9,11 2142:15 2143:13,16,17 2144:10,13 2145: 22 2146:13,17 2147:1 2150:5 2158:5 2159:3 2165:20
locally [3] 2101:3,18 2103:11
located [1] 2066:20
location [2] 2108:3,11
log [6] 2036:5,9 2086:10,10 2132: 20 2175:25
logarithmic [2] 2058:21 2086:6
logical [1] 1983:23
logs [6] 2049:22 2050:10,11 2175: 16,21 2176:13
long [4] 1995:19,22 2091:19 2106: 12
longitudinal [1] 1975:5
look [72] 1986:21 1987:23 1989:12, 21 1991:11 1999:21 2000:21,25 2015:11 2023:14,21 2027:1,25 2028:20 2030:19 2047:3 2051:5 2053:16 2060:18 2069:21 2070:3 2071:18 2074:21 2075:8,14,18 2076:9,17 2077:2 2084:14 2085:1, 18 2093:14 2094:8,15 2095:2,24 2096:11,24 2097:1,8,16 2098:17 2099:2 2100:9 2103:16 2108:21 2109:23 2110:21 2114:3 2115:1 2118:4 2120:2 2121:17 2124:16 2125:19 2128:17 2140:4 2149:12 2150:17,21 2151:6 2152:10 2154: 5,11 2160:25 2162:25 2163:2 2168:25 2178:8 2180:23 2182:6

looked [6] 2000:12 2026:14 2046: 18 2056:14 2066:19 2074:19
looking [18] 1972:25 1991:17 2005:21 2006:4,15 2076:21,23 2118:8 2123:20 2128:3 2141:6 2147:2,3 2149:11 2150:10 2173: 17 2178:10 2181:11
looks [2] 1957:22 2058:3
Los [1] 1954:11
lose [2] 2039:12 2130:8
loss [2] 2166:19,19
lost [1] 2012:20
lot [12] 2017:15 2031:18 2037:5 2038:9 2045:15 2058:8 2104:15 2132:13 2145:14 2158:12 2164: 21 2167:17
lots [4] 2056:17 2157:17,17 2158: 14
loud [2] 1956:9 1972:2
low [8] 1968:15 2042:4,10 2126:3 2127:7 2148:1 2163:3 2168:7
low-frequency [1] 1968:18
lower [8] 2054:14 2079:25 2118: 18 2119:17 2148:13 2159:22 2169:21 2179:11
lowers [1] 2004:13
LUCY [3] 1953:4 1977:23 2134:4
lunch [2] 2088:3,8
lurking [1] 2158:17
LUTZKER [3] 1954:16,18,18

M

MACE [1] 1952:21
MacLEAN [29] 1955:3 2019:17 2033:5 2064:6,8 2089:5,6,8,10 2096:3,7,15,23 2100:2,8 2104:18 2118:3 2123:24 2128:14 2133:5, 13,25 2172:3 2179:24 2181:21,24 2182:19 2184:12,15
MacLean's [1] 2179:19
made [19] 1981:22 2000:20 2020: 17 2022:15 2028:24 2041:13 2042:2,13 2045:21 2050:24 2059: 6,21 2068:20 2080:25 2094:21 2095:9 2147:15 2155:24 2174:22
Madison [1] 1951:14
mail [1] 2008:20
main [2] 2083:11 2180:13
maintains [1] 2084:1
majority [4] 1964:11,12 2081:7 2149:25
many [14] 1957:22 1961:17 1974:3 1975:4 2009:6 2027:25 2078:15 2137:8 2140:18 2146:17,19 2164: 2,2 2174:1
March [2] 1951:17 2183:24
margin [2] 2037:24 2059:13
marginal [6] 2020:25 2086:13,17 2102:18 2115:6 2133:14
mark [3] 2121:7,10 2129:16
marked [9] 1960:18 1987:15 2014: 2 2072:7 2096:21 2100:6 2121:3, 5 2152:4

MARKED/RECEIVED [1] 2184: 20
markers [1] 2182:1
market [139] 2018:1 2019:16 2021: 7,22 2022:5,22 2024:3 2025:12 2029:10,13 2032:8 2036:24,25,25 2037:9,9,15,20 2038:5 2039:4 2045:23 2046:14 2047:6,6 2048: 17,17 2059:8,9,17 2061:10,24 2062:6 2063:16 2065:3 2067:12 2078:21 2091:1,5,8,10,11,11,14, 17,19,22 2093:18,19 2095:11 2100:22 2103:2,8 2114:1 2129:14, 19 2134:12,15,16,21 2135:2,3,18, 19,22 2136:2,7,9,11,19,21 2137:9 2138:4,9,11,20,22,24 2139:4,7,15, 25 2140:6,8,10 2141:2,16,22 2142: 2 2143:1,17 2144:2,10,13 2145:3, 6,15,17,22,23 2146:5,10,13,17,20 2148:10,15,20 2152:17,19,24 2157:23 2158:5,11,16 2159:8,17 2160:11,24 2161:20 2162:3,14 2163:2,13 2164:1,4,8,13 2166:1,8, 16,23 2167:20,22 2168:2,9,11,20 2169:22 2170:7
marketplace [6] 1963:8 2017:12 2038:6 2068:17 2134:17 2154:22
markets [8] 2013:1,13,13,14 2016: 21 2048:16 2062:2 2142:5
Martin [3] 2075:22 2076:16,18
Martin's [1] 2076:5
mass [1] 2147:7
Massachusetts [2] 1952:9 1958: 17
massive [5] 2049:15,16,16 2062: 22 2068:23
Master's [1] 2012:10
math [1] 2080:4
Mathiowetz [1] 2003:6
MATTER [3] 1951:4 2003:17 2037: 21
MATTHEW [2] 1955:3 2089:10
maximize [1] 2161:8
maximum [4] 2005:19 2006:25 2057:11 2084:10
McPHIE [1] 1952:13
mean [40] 1964:25 1973:24 1974: 19 1988:21,22 1989:20 1995:19 1996:24 1997:21 1999:13,24 2004:2,3,23 2005:14 2007:4 2020: 22 2037:19 2041:15 2078:9 2081: 18 2082:14 2091:5 2104:16 2106: 8 2110:1,16 2111:10 2114:19 2115:19 2126:7 2129:12 2143:16 2146:11,14 2157:16 2158:14 2161:15 2178:1 2180:25
meaning [3] 1974:24 2030:10 2154:25
meaningful [1] 2042:20
means [5] 2097:9 2110:2 2112:2 2157:9 2167:4
meant [1] 2062:12

measure [1] 2024:4
measured [1] 2072:12
measuring [2] 2092:18,25
mechanisms [1] 2163:14
media [4] 2013:1,5,13 2016:20
meet [3] 1978:1,2 2000:15
Mellon [1] 1958:20
member [1] 1959:4
members [2] 1974:12 1995:10
mental [2] 1959:20 1962:8
mention [3] 1981:1 1986:3 1990:16
mentioned [5] 1988:9 2045:14 2052:10 2057:23 2059:20
mentioning [1] 1996:7
merged [1] 2050:10
mess [1] 1986:14
method [5] 1971:18 2009:5 2065:2,5 2075:1
methodological [1] 1959:25
methodology [15] 1959:2,5,6,11 1962:8,12,16 1980:23,24 2071:10 2072:1,24 2073:8,25 2074:18
methods [6] 1959:12,22 1960:5, 12,15 1966:10
mic [1] 1977:19
MICHAEL [2] 1952:6 1955:4
Michigan [6] 1958:22,25 1959:5 1960:8,10 2013:23
microeconomics [1] 2013:3
microphone [1] 1971:3
mics [1] 1956:7
mid-stream [1] 1975:10
might [27] 1967:2 1970:4 1982:14, 15 1983:16 1984:19 1988:1 1995:10 1999:22 2000:15 2007:6 2035:12 2036:5 2065:22 2073:20 2105:2,21 2108:19 2143:22 2153:11 2156:2 2157:20,20 2158:22 2160:20 2161:1 2169:2
miles [1] 2106:23
milk [1] 1991:21
mind [25] 1966:1 1967:9,23 1968:4, 10,23 1980:6,8 1984:19 1990:10, 11,18,19 1991:1,3 1996:1 1997:7 2000:1,16 2014:23 2016:13 2034:2 2155:21 2158:5 2160:19
mind-boggling [1] 2058:6
Mine [3] 2021:25 2046:10 2154:19
minimize [1] 2035:22
minimizes [1] 2159:11
minimum [20] 2038:5,11,20 2039:8,13 2044:21 2045:1 2046:4,22 2047:2,10 2057:9,10 2169:3 2172:22,22 2173:13 2174:2,5 2175:7
minus [2] 2107:17 2108:15
minute [21] 1980:10 2025:3,11,14 2027:7 2028:11 2034:17 2035:6 2052:12 2070:9,11,13,14 2085:8, 24 2086:1,13,17,21,24 2130:3
minutes [70] 2024:4,10,21 2025:16,19,23 2026:5,16,17 2027:11,13,

14,15,17,24 2028:2,6,9,10,21 2029:22 2030:20,21 2032:1 2040:8 2041:8,11,15 2042:9 2051:2 2055:18 2060:1 2070:13 2078:6, 10,23 2080:2 2081:16 2083:8 2084:21 2089:17,23 2102:6 2103:6 2108:12 2109:24,25 2110:22 2112:4 2116:18,22 2120:18 2126:10 2127:6 2128:1 2129:17,17,19, 25 2131:24 2132:1,4,6,8,21,22 2133:9,11,15 2171:3
misclassification [1] 2049:16
misclassified [1] 2050:13
miscommunication [1] 1984:17
misleading [4] 2003:8,13 2005:9, 12
missing [5] 1965:3 1969:1,7 2108:17,20
mission [1] 1960:16
misunderstandings [1] 1972:3
Mitchell [1] 1953:8
mix [3] 1971:21 1972:10 2129:7
model [59] 2014:19 2018:5 2023:5, 15,19 2027:23 2028:15 2034:14 2035:2 2038:2 2043:19 2048:7,11, 13,14,19 2049:4,6,6,11 2050:21, 25 2051:7,23 2052:4,6,6,7 2053:12 2055:12,20,25 2057:11,20,21 2058:3,11 2060:11 2063:12 2081:1 2082:7,10,12,14,18,25 2083:1,4, 7,22 2085:17 2087:3 2104:13,20 2109:13,19 2112:17,18 2133:18
modeling [1] 2023:13
models [8] 2034:3,6 2039:10 2045:1 2049:10 2058:21 2107:4,4
moderately [3] 1991:7,9,15
modern [1] 2057:17
modification [2] 2054:25 2055:1
modifications [1] 2085:6
modified [1] 2047:21
modifies [1] 2054:24
moment [1] 1973:17
money [7] 2037:16 2039:6,7 2098:15 2107:16 2115:22 2117:5
monitor [2] 2012:20 2077:23
Monroe [5] 2097:25 2098:14 2099:21 2100:11,15
Montreal [1] 2069:8
Moring [1] 1952:22
morning [15] 1956:3,11 1970:24, 25 1977:23 2002:23,24 2003:2 2011:23,24 2040:8,14 2064:22 2183:7,20
Most [16] 1959:16 1971:18 1976:7 1978:24 1983:16 2012:24 2019:5 2021:14 2034:2 2091:8 2112:20, 22 2114:17,19 2140:11 2167:6
mostly [3] 1959:11 1960:14 2071:5
move [11] 1962:14 1987:12 2018:14 2047:18 2096:16 2100:2 2128:15 2149:10 2151:23 2164:20

2170:10
movie [5] 1991:10 1992:6,10,10 1993:25
movies [11] 1965:13 1977:7 1989:13,17 1990:17,21 1994:10,18 1995:15,20 1998:2
MPAA [1] 2115:21
MS [42] 1977:17,19,22,25 1979:12 1984:4,25 1985:24 1987:4,7,11,17 1993:10 1996:3 1998:24 2049:20 2076:18 2134:3 2140:7 2141:18 2145:18 2148:17 2151:23 2152:5, 6 2153:6,19,22 2155:13,23 2156:4, 6,14,16 2164:19 2165:8,9,14,17 2179:16 2184:6,13
much [18] 1963:20,23 1967:12 2029:18 2039:20 2045:7 2046:15 2052:2 2057:7 2102:15,22,24 2111:3 2116:22 2137:7 2143:10 2147:15 2153:18
multicollinearity [1] 2042:18
multiple [1] 2093:9
multiplied [1] 2126:10
multiply [8] 2025:15 2028:10 2029:3 2072:2 2075:10 2078:22,23 2128:1
music [1] 2159:9
musical [1] 2160:4
must [1] 2136:12
myself [2] 2020:12 2173:18
Mysteries [1] 1996:9

N

N.W [8] 1952:9,15,23 1953:9,19 1954:5,19 1955:7
name [7] 1958:7 1986:15 2002:25 2011:25 2012:2 2064:22 2165:7
namely [1] 1965:16
narrative [1] 2019:18
national [2] 2150:2 2165:20
natural [2] 1978:23,25
naturally [2] 1967:12 1979:3
nature [1] 2038:4
Navy [1] 2013:20
near [2] 2078:2 2099:2
nearby [1] 2105:14
necessarily [5] 1995:8 1999:13 2010:2 2076:3 2147:22
necessary [2] 2022:19,21
need [29] 1956:22 1957:23 1975:21,22 1994:22 2011:16 2022:23 2025:5 2035:14 2037:13,18,19,19, 20 2049:12 2051:18 2065:12 2082:22 2086:8 2094:12 2103:1 2104:9 2111:12,12 2132:23 2136:11,13 2142:10 2152:18
needed [2] 1969:25 2068:21
needs [3] 1994:15 2023:12 2116:1
negative [33] 2030:20,23 2031:7, 16 2042:22 2043:14 2044:2,4,15 2054:22 2055:8 2114:8,17 2115:16,16 2116:24 2117:7,8,12 2122:8 2124:25 2125:2,12,15 2126:17,18,

19,21,22 2127:12,21,25 2143:19
negotiate [12] 2067:7 2140:17 2142:3,13 2157:4 2159:7 2160:13, 18 2161:15 2162:19,20 2169:2
negotiating [2] 2067:12 2143:12
negotiation [5] 2136:14,23 2143:3 2146:2,7
negotiations [5] 2141:14 2146:11 2157:24 2158:24 2163:21
net [3] 2104:7 2107:7,7
network [6] 2101:19 2117:24 2132:21 2133:10,15 2166:17
networks [3] 2150:2 2161:25 2165:20
neutral [1] 1997:20
never [4] 1964:18 1988:23 2102:24 2113:15
new [10] 1956:8 2012:18 2034:16 2159:16,19 2161:6 2171:19,22 2172:9 2173:9
news [7] 1957:25 1965:13 1967:11 1977:8 1996:9 2145:1 2159:18
next [16] 2011:1,3,4 2095:2 2097:6 2098:8,24 2099:17 2110:23 2150:3 2151:17 2154:12 2156:3 2180:23 2183:4,5
Nice [3] 1978:1,2 2159:14
niche [6] 2147:4 2148:5,6 2167:14, 14 2169:11
Nielsen [4] 2136:5,6 2167:8,8
ninth [1] 2098:18
noise [2] 1970:17 2010:14
non [1] 1982:13
non-amended [1] 2172:16
non-Canadian [1] 2116:9
non-carriage [4] 2030:8 2093:11 2095:17,20
non-examples [1] 1979:25
non-respondents [1] 1999:19
non-super-station [2] 2106:6,22
non-team [1] 1988:25
non-U.S [1] 2000:8
non-zero [2] 1976:12 2007:5
None [4] 2103:17 2107:3,3 2184:17
Nonetheless [1] 2074:11
Nope [1] 2084:16
norm [1] 1975:6
northern [1] 1976:9
notation [1] 2123:9
note [3] 2008:2 2016:7,8
notes [1] 2185:5
nothing [5] 1957:11 2168:10 2171:6,7 2181:17
noticed [2] 2026:14 2173:18
notion [1] 2065:8
nuance [1] 2094:7
null [3] 2111:21,24 2112:15
number [58] 1964:3 1966:2 1970:18 1987:15 2005:23,25 2014:8 2022:10,11 2025:15 2028:20 2029:7 2030:23 2038:19 2039:2

2042:5,10 2043:20 2048:5 2050:
13 2051:12 2054:2 2058:6 2059:5
2076:12 2078:17 2089:16 2096:
21 2099:13 2100:6 2101:17 2103:
11 2105:24 2110:7 2112:3 2117:
12 2124:14 2127:6,21 2129:5,6
2130:12,15,18,20,22,22 2131:2,13,
23 2144:12 2153:4,5,8,12,15 2154:
1 2170:15
numbers [14] 1964:9 2026:20
2032:8 2052:17 2056:2 2058:23
2079:20 2124:15 2127:12 2147:
22 2151:12 2152:3 2167:18 2178:
2
NYMAN [1] 1955:5

O

o'clock [2] 2088:7 2183:20
oath [3] 2014:24 2016:14 2183:16
object [1] 2072:19
objection [14] 1957:7 1962:18
1987:13 2016:22 2019:17 2033:5,
5 2073:2,13 2074:13 2096:18
2100:4 2151:25 2155:19
observation [3] 2103:4,16 2134:
21
observations [2] 2058:6 2123:7
observe [1] 2021:5
observing [1] 2162:8
obtain [4] 2155:2,16 2156:19 2157:
7
odds [1] 1991:14
offer [3] 2016:19 2095:10 2100:22
offered [6] 2018:12 2061:13 2089:
14 2097:19,20,25
offering [3] 1994:17 2046:25 2132:
25
Office [4] 2137:6,12,17 2154:14
officer [1] 2013:19
Official [1] 1962:1
often [2] 1972:1 2160:22
okay [168] 1956:24 1957:10,12
1985:11 1986:9 1987:6 2007:14,
16,25 2010:20 2012:22 2014:15
2016:11 2019:21 2020:3,6,9,20
2021:3 2022:1,25 2023:15 2024:
18 2025:4 2026:8,11,19,23 2028:
20 2029:9 2030:2,18 2032:3 2033:
13,16 2035:6 2036:1 2039:22
2041:4,20 2047:16,17,24 2048:3,5,
10 2049:7 2050:20 2051:13 2052:
5 2053:2,24 2054:16 2055:11
2060:12,17,24 2061:20 2063:1
2065:15 2066:2,7 2067:10,18,22
2068:4,19,25 2069:7,14,21 2070:8,
12,15 2071:6,13 2072:5 2076:14
2077:2,22 2078:16,24 2080:5,7,16
2081:5,14,20 2082:5,21 2083:2,12,
18 2084:11,14,17 2085:1,14,23
2086:3,11,20 2087:1,6,12,15,20,
23 2089:12 2091:18 2093:9,14
2094:8,11,13,15 2095:1,24 2098:3,
17 2099:21 2100:1,16 2104:12,21

2106:16 2109:22 2110:7,10,16
2111:5 2113:17 2118:13,13 2120:
10 2121:23 2122:5,17 2124:3,13
2125:1,19 2128:22,23 2129:12
2133:24 2139:2,13 2149:21 2150:
16 2151:1,9,18,19 2152:7 2153:1,
10,14,23,25 2165:3 2170:23 2173:
19 2179:21 2180:18,22 2181:11
2183:8
OLANIRAN [1] 1953:3
old [1] 1956:7
omission [3] 2123:13,15,19
once [3] 2002:17 2121:12 2159:25
One [78] 1953:18 1963:21 1965:8,
14 1969:11,16 1970:1 1971:18
1973:13 1977:1 1978:18,18 1982:
15,16 1983:15 1991:19 1997:25
2000:6 2007:19 2010:2,12 2011:
14 2014:11,17 2019:1 2022:10,11
2023:2 2024:24 2026:23 2029:19
2036:8 2037:7 2039:3 2041:8
2044:1,1 2045:16 2049:9 2055:9
2061:14,15 2066:10 2076:12,25,
25 2079:24 2083:22,23 2088:7
2090:9 2097:24 2098:3 2099:10
2101:20 2105:2 2106:4 2108:5
2111:1,25 2112:24 2113:4,5 2114:
12 2116:7 2117:22 2122:17,25
2124:3 2146:15 2147:20 2150:9,
10,18,19 2164:21 2175:14 2181:
21
ones [4] 1991:7 2024:3 2025:1
2034:11
ongoing [1] 1975:4
only [29] 1969:3,4,12,13,14,21
1970:1 1982:14,18,18 1983:15,17
1984:8,10,14 1996:12 2006:5,13,
18 2014:10 2026:2 2054:6 2066:
19 2067:19 2073:21 2118:9 2124:
5 2162:20 2177:16
open [1] 2074:12
operator [15] 1999:3 2001:22
2021:4 2095:9 2135:11,13,15,16
2136:9,20 2137:3 2138:12 2139:7
2168:17,22
operators [5] 2083:16 2166:9
2168:24,25 2169:20
operators' [1] 2072:14
opine [3] 1978:8 1980:12,19
Opinion [16] 1962:2 1972:18 1974:
4 1977:5 1978:15 1980:22 1981:
12 1985:19 1992:5 1994:17 2009:
1,13 2010:2 2044:22 2064:25
2087:6
opportunities [1] 2138:6
opportunity [3] 2117:13 2166:15,
25
opposed [1] 2117:13
opt [1] 2160:5
optimal [1] 2009:11
options [1] 2019:13
oral [1] 2087:2

order [6] 2035:4 2065:13 2098:15
2113:11 2137:24 2143:7
ordinary [1] 1999:19
organization [3] 1973:9 1974:2
2013:4
organizations [1] 2016:21
organized [1] 1956:19
organizing [1] 2042:7
orient [1] 1993:21
origin [2] 2050:1 2176:6
origin's [1] 2050:8
original [3] 2050:9 2051:20 2171:
13
originals [1] 1956:7
originate [1] 2000:5
other [62] 1963:22 1965:8 1967:2,
9,16 1969:18 1974:12 1978:11,12,
16 1979:15 1990:10,16 1995:25
1999:16 2000:17,17 2002:16,18
2010:2 2018:14 2022:6 2023:3
2026:14 2035:10 2042:19 2043:5
2044:5,16 2050:6 2056:2 2065:6
2067:7 2068:2 2071:5 2079:17
2081:22,25 2084:2 2089:13 2090:
6,10 2092:18,25 2102:16 2116:11
2119:2,20 2129:4 2132:9,9 2144:
5,19 2146:17 2159:9,16,18 2161:7
2167:9 2169:23 2177:24 2181:12
others [6] 2024:13 2094:2 2101:4
2121:22,22 2170:4
otherwise [5] 1988:2 1990:20
2009:14 2141:9 2143:21
out [28] 1971:6 1972:2 1986:5
1988:2 2021:4 2037:14 2041:16
2042:16 2045:6,9,11,11 2067:11,
25 2068:16 2069:2 2123:1,4 2136:
1 2141:24 2142:11 2158:11 2160:
5,25 2163:1 2173:11,25 2174:1
outcome [7] 1960:3 2126:15 2129:
2,12 2130:19 2131:3,25
outline [4] 2032:17 2040:2,21
2056:4
outside [27] 1976:12 2023:9 2051:
3 2052:13,16,20,24 2053:9,21
2056:1 2060:5 2065:9 2066:23
2067:2 2083:20,23 2084:20 2086:
24 2108:5 2120:25 2124:19,23
2125:16 2126:6 2127:4 2138:11
2163:24
outweigh [1] 2105:22
over [36] 1964:5,8 1969:18 1970:
24 1973:6 1974:12,23 1975:18,20
1986:22 1996:11 2026:16 2029:
11,12 2038:23,25 2058:7,12 2070:
12 2080:3 2086:3,20 2103:7 2106:
6,9,11,17 2140:12 2141:2,14 2154:
12,24 2157:13 2165:21 2166:4
2178:25
overall [5] 2005:20 2056:20,22
2059:22 2106:1
overruled [1] 2074:13
oversees [1] 2176:1

overview [4] 1963:16 2017:22
2018:3 2033:2
overwhelming [1] 2081:6
overwhelmingly [1] 2107:1
own [10] 1982:8 2047:24 2048:1
2138:8 2160:13,19 2161:2,7,14
2162:12
owned [1] 2160:11
owner [13] 2135:23 2137:13,20
2138:5 2139:20 2141:20 2143:4
2145:20 2146:7 2148:18 2158:1,1,
23
owners [1] 2140:19

P

p.m [3] 2088:8 2089:2 2183:22
page [98] 1980:11 1986:10 1987:
24 1989:12 1991:17 1993:11,13,
17,17,22 1994:1 1996:4,11 2005:
21 2006:16 2007:23 2008:3 2014:
17,19 2016:8 2023:16 2051:13
2060:19 2066:1,2 2069:22 2070:6
2076:18 2077:11,14,15,25 2078:2
2085:3,18 2086:11 2094:9,12,13
2095:2 2096:25,25 2097:18 2098:
6,6,8,24 2099:3,17 2100:9,10
2108:22,23 2109:3 2115:3 2118:6,
7,12 2120:3,6,7,8,8,9 2124:17
2125:22 2128:18,20 2149:11,13,
20 2151:14 2152:8,11 2153:3,4,7,
13,15 2154:1,1,12,12,24 2164:22
2170:19 2171:10,11 2172:13,19
2176:4,24 2177:2,3 2178:20 2180:
11,23 2182:12
pages [5] 1981:23 2097:17,17
2098:18,19
paid [12] 2007:10 2017:4 2023:22
2028:25 2072:13 2089:18 2112:4
2137:5,11,12,15,16
pain [1] 2068:25
panel [2] 2061:2 2080:15
paper [2] 1991:6 2008:20
paragraph [9] 1980:11 1989:21
1993:12 2008:1 2094:14 2095:2
2118:9 2153:25 2154:6
parenthesis [1] 2027:21
parse [1] 2067:25
part [22] 1960:16 1977:9 1993:14
2012:18 2022:15 2025:5,8 2052:8,
14 2075:25 2094:5 2096:12 2099:
2 2105:16 2116:20 2129:24 2142:
5 2146:13,15 2160:8,17 2167:6
partially [3] 2057:5 2097:10 2101:
14
participants [2] 1964:9 1970:18
participate [1] 2137:23
participating [3] 1964:3,6,12
particular [20] 1959:8,19 1980:25
1989:18,24 1994:18 1999:1 2000:
1 2007:2 2009:2 2010:4,5,8,10
2023:23 2100:18 2111:19 2158:7
2162:16 2163:15
particularly [1] 1975:2

parties [1] 2026:14
party's [1] 2155:21
Pasadena [1] 1954:12
pass [1] 1974:24
passing [1] 2165:5
passive [4] 1971:5,15,21 1973:2
past [13] 2018:6 2019:9 2026:2
  2059:12,16 2071:1,4,16 2074:2,20
  2076:4 2101:22 2147:25
pattern [2] 2027:3 2029:19
Patton [1] 1952:14
pause [1] 2161:12
pay [13] 2021:1,18 2025:11 2031:3
  2037:11 2044:20 2046:7 2089:21
  2103:1 2137:3 2140:25 2154:8
  2173:13
paying [11] 1959:19 2038:16,20
  2047:1,1 2089:24 2090:4,10,11,16
  2174:2
payment [7] 2021:10 2023:24
  2092:2,5,7 2095:8 2103:5
payments [16] 2020:16 2035:13
  2036:6,22 2058:4 2091:3 2092:10,
  14,16,20,23 2093:2 2131:25 2173:
  14,21,21
pays [1] 2173:16
peer-review [1] 2113:9
peer-reviewed [3] 1961:20 2013:
  11 2113:25
Pennsylvania [2] 1952:23 2012:
  14
Pentagon [1] 2013:21
people [19] 1965:21 1973:8 1979:
  3,9 1984:2 1991:25 1999:19,20
  2008:21 2074:22 2078:15 2141:8
  2142:20 2143:21 2144:12,19
  2146:22 2167:16 2169:11
people's [1] 1995:7
per [13] 2025:11,14 2028:2,11
  2030:21 2070:9,11,13,14 2085:8,
  24 2086:1,17
percent [51] 1969:15 1983:8,18,22
  1984:6,15 1985:2,6,14 2003:15
  2006:18,22 2007:2,4,10 2028:21,
  22 2029:1,3,4,8 2050:14 2076:8,
  20 2078:25 2080:3,8,12 2081:24
  2087:20,23 2091:10,11,19 2093:
  19,25 2094:3,21 2103:8 2106:22
  2110:4 2114:15,21,23,23 2115:23
  2117:7,9 2119:15 2181:2,3
percentage [4] 2075:10 2077:5
  2079:11 2111:11
percentages [2] 1969:19 2006:15
perform [1] 2183:19
performed [1] 2067:19
perhaps [2] 2116:12 2158:22
period [9] 1975:18 2023:23 2076:7
  2079:7,8 2080:1,2,10 2095:13
periods [3] 2016:9 2058:7 2079:
  17
peripheral [1] 1991:16
permitted [2] 1976:10 2139:8

personally [1] 1993:6
perspective [3] 1977:12,13 2048:
  23
Ph.D [3] 1958:17 2012:12 2013:22
phaseout [5] 2154:16,25,25 2155:
  14 2156:18
phrase [5] 1984:16,17 1998:6,7
  2008:20
pick [1] 2039:22
picked [2] 2069:10 2129:25
picking [1] 2161:3
picture [1] 2078:14
piece [6] 1969:11 2023:21 2106:4
  2108:17,19 2147:20
pieces [2] 2017:14 2169:7
Pillsbury [1] 1955:6
pilot [1] 1972:23
pinpointing [1] 2059:6
pit [1] 1957:13
Pittman [1] 1955:6
place [5] 1985:21 2049:24 2053:17
  2118:9 2167:5
places [3] 2053:22 2134:14 2167:
  4
plain [1] 2060:3
plan [1] 2155:1
plausible [3] 1966:12 2140:21
  2141:4
play [3] 2107:2 2136:6 2143:10
playing [1] 2069:8
Please [24] 1956:3 1957:13,14,20
  1958:6,14 1960:22 1994:25 2007:
  22 2011:12,25 2012:8 2014:2
  2015:25 2017:22 2040:11 2065:
  20 2072:6 2076:15 2089:4 2096:
  17 2151:2,6 2180:10
plenty [1] 2004:24
PLLC [1] 1954:4
PLOVNICK [43] 1953:4 1977:17,
  19,22,24,25 1979:12 1984:4,25
  1985:24 1987:4,7,11,17 1993:10
  1996:3 1998:24 2134:3,5 2140:7
  2141:18 2145:18 2148:17 2151:
  23 2152:5,6 2153:6,19,22 2155:13,
  23 2156:4,6,14,16 2164:19 2165:8,
  9,14,17 2179:16 2184:6,13
plus [1] 2052:6
point [29] 1966:8 1990:20 1994:12
  1995:11 2001:7 2032:17 2033:20,
  23 2038:8 2040:4,21 2047:15,18,
  19 2056:6 2073:15 2095:23 2111:
  23 2118:23 2124:11 2133:17
  2143:23 2149:13 2159:10 2160:
  10,23 2171:9,11 2172:12
pointed [1] 2173:11
Policy [1] 2013:8
political [1] 2005:1
polling [1] 2005:1
pool [1] 2028:22
popular [2] 2160:16,20
Porter [1] 1952:8
portion [4] 2026:2 2051:16 2061:6

2129:14
positive [3] 2030:4 2110:12 2114:
  22
posits [1] 2144:3
possibility [1] 2112:2
possible [9] 2006:25 2009:17,24
  2035:24 2042:14 2057:10 2084:
  11,13 2164:2
possibly [2] 2007:5 2108:1
post-STELA [5] 2045:17,17 2057:
  14 2059:18 2076:2
postdoctoral [1] 1958:19
potential [4] 1971:24 2035:23
  2057:10 2154:18
potentially [3] 1965:4 2058:16
  2170:1
practical [1] 2001:4
practice [13] 1964:17 1966:9 1973:
  7,11,17 1974:13 1982:14 2043:20
  2044:18 2045:13 2084:7 2109:19
  2183:18
pre-testing [15] 1966:10 1970:2
  1971:18 1972:17 1973:18,21
  1974:6 1975:2,6,21,22,25 1976:1
  1979:22 1994:15
preceding [1] 2079:11
precise [7] 2035:24 2045:5 2058:
  10 2112:21 2114:22 2173:1 2181:
  3
precisely [5] 2043:3,15 2044:6
  2110:5 2167:13
precisely-estimated [2] 2044:10
  2055:7
precision [3] 2039:12 2057:11
  2059:11
predict [1] 2039:10
preferable [1] 1997:12
preference [1] 2104:4
preferences [2] 2145:12 2148:7
preferred [1] 2082:15
preparation [1] 1978:5
prepare [4] 1960:25 2014:13 2015:
  15 2033:11
prepared [3] 2017:16 2049:20
  2063:21
presence [1] 2038:11
present [3] 2060:20 2109:15,16
presented [7] 1976:16 1989:22
  2002:12 2047:24 2048:1 2172:1
  2178:6
press [1] 1956:23
pressure [3] 2008:15,23 2009:9
presumably [1] 1968:17
presume [1] 1957:11
presuming [1] 2168:1
pretest [4] 1971:2,2,5 1974:25
pretested [3] 1972:14 1974:21
  1975:7
pretests [2] 1967:1 1972:19
pretty [11] 1963:25 2029:18 2046:
  14 2068:23 2110:11 2121:20
  2168:7 2174:6 2176:3,12 2181:8

prevent [1] 2132:10
previous [3] 1974:17,20 1993:13
previously [8] 1960:19 1961:24
  1967:24 1975:3 2014:3 2015:10,
  24 2019:24
price [7] 2025:12,12,13 2036:23
  2141:13,13 2163:21
prices [16] 2031:23 2037:12,17,18,
  20,22 2062:5 2140:13 2141:14
  2142:22 2145:3 2157:13 2166:24
  2169:2,21 2170:2
pricing [1] 2036:25
primarily [1] 1982:16
primary [3] 1964:1 2157:12 2158:
  4
principal [1] 1957:2
principals [2] 1956:18,25
prior [5] 2013:16 2019:11 2029:19
  2070:20 2071:7
probability [1] 2043:12
probably [9] 1968:1,3 1979:10
  1986:22 1988:24 2001:8 2136:6
  2141:14 2148:4
probative [1] 1972:23
probe [1] 1972:8
probes [1] 1971:24
problem [11] 1967:15 1973:5 1983:
  20 1986:8 1997:22,24,24 2019:5,9
  2127:9 2161:10
problems [9] 1969:23 1971:7,25
  1972:9 1973:14 1979:7 1981:1
  2040:13 2042:18
procedure [1] 2082:16
proceed [1] 2018:11
proceeded [1] 2073:21
proceeding [22] 1962:23 1980:15
  1981:5 1982:4 1983:3 2008:10
  2009:2 2017:2,3 2021:23 2023:4
  2065:7,17,24 2072:20,21 2089:15
  2135:5 2137:23 2138:13 2147:3
  2185:6
proceedings [11] 1960:24 1962:
  25 2017:18 2019:11 2027:5 2046:
  18 2061:24 2062:25 2070:20
  2075:22 2166:13
process [5] 1973:4 2062:21 2137:
  19 2138:3 2169:15
processes [3] 1959:20 1962:8
  1999:15
produce [1] 1959:18
produced [4] 1961:17 2063:11
  2074:3 2151:11
producing [1] 1962:10
product [1] 2025:18
products [1] 1968:21
professional [1] 1974:2
professionals [1] 1974:3
Professor [31] 1962:19 1972:12
  2010:21 2012:16 2013:23,25
  2015:22 2016:25 2017:13 2019:
  24 2021:20 2026:18 2030:14
  2033:10 2040:18 2050:5 2054:1

2056:9,12,21,22 2063:13,14,24 2064:4,13 2104:15 2146:23 2157: 23 2175:24 2182:25
professors [1] 2012:24
proffered [1] 2072:23
profit [1] 1965:18
profit-maximizing [1] 2161:17
Program [70] 1953:2 1959:4,5,7 1977:24 1998:15,25 1999:16,21 2000:13 2001:15 2002:4 2024:8 2027:15 2030:19 2031:3,11 2032: 1 2035:15 2041:18,25 2042:12 2049:13 2050:3 2060:13 2068:1 2069:18 2081:10 2086:4,14,20,23 2102:6 2114:4,5 2115:15 2116:17 2117:19,19,20 2121:12,14,20 2122:5,7 2124:5 2134:5 2135:24 2138:8 2139:20 2141:20 2142:12 2148:24 2150:23 2158:1 2160:12 2171:19 2175:16 2177:8,10,18,20 2178:5,9,13,17,25 2179:4,13 2181: 13
programmer [1] 2144:25
programming [142] 1965:9,12 1967:8 1977:9 1978:10,25 1979:4, 23 1984:14,15 1994:5 1998:14 2000:21 2001:2,23 2002:11 2003: 4 2005:20 2010:12 2017:12 2018: 2,17 2019:16 2021:1,18,22 2022:6, 17,23 2024:2,5,7,8,10,21,24 2025: 3,25 2026:3 2027:7,11 2031:6,14 2032:9 2034:17 2035:5 2041:11, 17,18,23,24,25 2042:3 2045:24 2050:9,11,14 2051:2 2052:2,12,24, 25 2053:9 2055:18 2059:17 2060: 1 2062:3,4,16 2063:17 2068:5,8, 14 2069:2,16 2070:10 2071:14,21 2072:14 2073:12 2074:19 2075: 11 2078:12,15 2080:21 2081:9,15 2082:4 2083:7 2084:21 2085:9,24 2086:5 2089:17 2090:1,6 2103:6 2114:2 2116:1,3,3,11 2117:17,19 2119:14 2126:2,5 2128:1 2129:25 2130:3 2131:24 2132:6,8 2142:20 2143:21 2146:10 2147:4 2148:10, 21 2150:5 2152:13,15,18 2155:3,4, 17,18 2156:20,21,25 2157:10 2162:1,18 2164:5,8,11 2166:22 2167:23 2170:8 2175:22 2176:5, 10
programs [29] 1963:8 1965:16 1967:10 1989:24 1992:20 1996: 12,17 1997:10 2000:3,9,23 2002:4 2050:13 2056:14 2069:3 2120:16 2126:8,24 2128:4,8 2144:21 2149: 1,7 2159:6,18 2160:4 2161:14 2162:22,24
prohibit [1] 2067:11
prohibited [3] 2023:10 2049:3 2066:24
prohibition [2] 2139:16 2158:13
prohibitive [2] 2107:11 2158:24

project [1] 1957:23
prone [1] 1999:17
properly [2] 2048:23 2054:4
property [2] 1965:15 2013:14
proposed [2] 2034:8 2170:13
proposing [1] 2168:11
provide [11] 1958:13 1963:16 1967:5 1978:9 1982:17 2012:8 2015:5 2021:21 2035:4 2109:5,12
provided [6] 1968:9 1982:18 1990: 18 2005:7 2019:25 2020:11
providing [7] 1989:18,19 1997:13 1998:17 2003:7 2005:11 2109:4
psychological [1] 1965:19
psychology [2] 1958:18,19
PTV-only [5] 1981:24 1982:10,25 1984:7 1985:8
Public [13] 1953:13 1962:2 1965: 14 1966:6,7 1969:4,13 1974:4 1979:1 1983:8 1984:14 2122:11 2177:22
publication [3] 2113:20,21,25
publications [3] 1961:11,13 2113: 10
publish [1] 2013:10
published [3] 1961:17 2113:8,9
pull [6] 2037:14 2051:9 2096:1 2099:23 2116:10,12
pulling [4] 2045:9,11,11 2117:4
purchased [2] 2068:16,18
Purell [1] 2132:22
purported [2] 1996:19,20
purports [1] 2004:6
purpose [3] 2009:21 2017:1,3
purposes [1] 1960:2
pursuant [2] 2139:11 2154:9
pursue [1] 1973:13
push [2] 2169:22 2170:2
pushed [1] 2009:13
pushes [1] 2009:10
pushing [1] 2158:11
put [22] 2023:16 2027:2 2029:17 2035:12 2037:7 2039:3 2060:5 2065:1 2070:1 2072:5 2104:9 2123:12,16 2140:22 2148:8 2149: 1 2158:4 2159:15 2161:4,24 2167: 12 2169:17
puts [3] 2062:10,15 2091:24
putting [2] 2167:21 2168:14

Q

qualified [2] 1962:19 2016:23
quality [2] 1959:13 2059:22
quantify [1] 2175:1
quantity [2] 2025:19 2028:10
Quarterly [1] 1962:2
question [44] 1966:23 1968:25 1971:1,17 1972:2 1974:19 1975: 24 1976:14 1977:2 1982:7 1983: 14 1984:11 1985:20 1990:6,9 1993:8,22 1994:7 1998:14 2002: 12 2003:20 2004:1,18 2007:19 2019:7,8 2030:18 2040:25 2043:9

2073:14 2074:13 2102:21 2124: 21 2125:6 2146:24 2155:22 2156: 2,3 2158:19 2159:24,25 2162:7 2181:21 2182:7
questioned [1] 1973:9
questioning [1] 2072:19
questionnaire [4] 1970:16 1975:1, 9 2008:20
questionnaires [2] 1966:10 1987: 19
questions [33] 1959:19 1962:10 1966:13,15 1969:10 1970:22 1971:7,9 1974:22 1975:12,19 2002:15,18,20 2003:18 2005:3,4,5 2007:15 2008:22 2019:6,20 2020: 19 2030:2 2033:6 2051:17 2064:1, 12 2088:1 2134:1 2160:10 2179: 17,20
quick [1] 2060:18
quickly [5] 2008:16 2009:10,14 2152:8 2154:2
quite [10] 1964:4 2040:12 2043:8 2051:11 2055:6 2079:18,19 2091: 4 2100:25 2101:5
quoted [1] 2105:18

R

Radio [2] 2049:21 2175:24
radishes [2] 1968:17 1988:16
raise [3] 1957:14 1970:7 2142:21
raised [4] 1967:2 1968:25 1969:1 2018:9
raising [2] 1995:2,6
ran [3] 2056:17 2069:14 2082:8
range [4] 2063:19,22 2112:7 2173: 6
ranges [1] 1964:5
rare [1] 1968:24
rates [1] 2169:22
rather [5] 2036:6 2043:1 2140:14 2147:11 2157:25
ratings [3] 2136:5,6 2146:3
read [6] 2019:25 2027:23 2032:21 2051:18 2140:15 2176:4
readers [1] 2031:21
readily [1] 2174:9
reading [2] 2133:20 2156:7
real [3] 1979:6 2046:11,11
realizing [1] 2122:23
really [63] 1956:9 1959:1 1960:15 1967:7,8,20,22 1970:1 1973:11,12 1979:15 1992:10,11 2001:4 2004: 9 2031:17 2035:24 2036:10,15 2037:23 2044:11 2045:15 2047: 12 2049:3 2050:17 2052:15 2055: 5,5,21,23 2061:3 2062:7,23 2063: 9 2065:13 2067:8 2078:14 2082:1 2111:2 2116:16,25 2123:13 2127: 1 2131:5 2133:19 2141:2,10 2143: 16 2144:23,25 2145:7 2148:9 2158:16 2161:1,13,16 2164:9 2166:11 2173:8,25 2174:6,8 2178: 7

reason [7] 2005:4 2035:11 2036: 16 2058:22 2068:10 2144:9 2161: 12
reasonable [3] 1980:24 2095:11 2117:25
reasonably [1] 2110:5
reasons [1] 2046:21
rebuts [1] 2130:5
rebuttal [19] 2003:11 2005:22 2016:2 2043:6 2049:5 2054:17 2077:13,13,17 2085:2,4,19 2120:2 2124:10 2128:17 2172:18 2173: 11 2176:25 2180:11
rebuttals [2] 2030:25 2038:9
recalculated [1] 2170:12
recall [6] 1989:23 1990:3 2030:6 2065:17 2066:7 2070:23
recategorizing [1] 2120:16
receive [3] 2099:8,16,18
received [6] 1985:2 1987:16 2026: 13 2096:22 2100:7 2152:4
recently [1] 2013:6
recess [5] 2040:8,9 2088:6,8 2183: 20
recessed [1] 2183:23
recognize [3] 2096:8 2099:24 2100:1
recommendation [4] 1974:5,8,13, 15
reconvene [2] 2088:7 2183:23
record [6] 1958:7 1960:22 2012:1 2049:25,25 2165:7
records [1] 1999:16
recover [1] 2166:10
RECROSS [1] 2184:2
RECROSS-EXAMINATION [2] 2179:22 2181:23
redirect [5] 2010:18,19 2182:20, 22 2184:2
redistribute [1] 2137:10
reduce [1] 1982:11
reduces [3] 2032:2 2059:13 2116: 13
reducing [1] 2150:6
redundant [1] 2156:3
reference [1] 1982:3
referred [2] 2070:19 2165:5
referring [2] 1998:20 2072:16
refers [2] 2061:14,15
reflect [2] 2053:1 2112:18
reflected [1] 1964:22
reflects [1] 2057:17
regard [4] 1984:18 2045:20 2127: 10,13
regarded [1] 2100:14
regarding [1] 2172:21
region [7] 2023:1,5 2028:16,23,24 2029:1 2030:5
regression [126] 2017:25 2018:8, 15,25 2019:14 2020:11,24 2021: 16 2022:4,25 2023:19 2024:13,19 2025:9,10,18 2026:6 2027:4,10,18

2028:1 2030:9,17 2033:25 2034:9 2036:18 2038:1,1,7 2039:10 2040: 1,23 2041:1,9,14,22 2042:6,25 2043:1,19,24 2044:20,25 2045:12 2047:21,25 2048:1,4,20 2049:10 2050:22 2051:1 2052:1 2054:17, 23,25 2055:2 2057:25 2058:10 2059:2,15,21,22 2060:4,21 2063: 14 2065:1,4 2066:9,17,19 2067:18, 25 2069:15 2080:18 2082:9 2085: 7,21 2087:7,9,16 2090:19 2091:9 2092:1,10,18,24 2093:14 2095:16 2101:17 2102:4,5,9 2103:10,16 2107:4 2108:21,25 2109:4 2118: 18 2120:5,11,12,15 2121:2,4 2125: 21 2170:22,24 2171:12 2172:6,6,7, 25 2173:15 2177:4 2180:3,7,15,16 2181:13 2182:2,3,3,4,11

regression-only [1] 2025:4

regressions [24] 2020:22 2021:21 2023:4 2033:21 2036:21 2037:21 2038:10 2045:22 2047:13 2061:9, 14 2063:20 2083:22 2084:12,18 2089:14 2091:22 2101:9,10 2103: 4,17 2108:20 2120:23 2171:7

regulated [19] 2036:23,23 2037:17, 18,22 2038:4 2061:10 2135:19,22 2136:9,19 2138:4,19,22,24 2139:4, 7 2142:2 2168:9

regulation [3] 2154:3 2163:6 2166:2

regulations [1] 2139:11

regulatory [3] 2049:23 2083:14 2162:16

rehearsal [1] 1973:3

reject [8] 2111:21,23,24 2112:2,9, 9,14 2114:21

REJECTED [1] 2184:20

related [4] 2038:4 2129:6 2130:14, 15

relates [3] 1993:25 2127:22 2159: 25

relationship [1] 2036:12

relative [43] 1978:10 2017:11 2018:1,5 2019:15 2021:22 2022:5, 6,9,22 2024:3 2029:10 2032:8 2038:6 2045:23 2059:17 2061:23 2063:16 2065:3 2069:24 2070:9 2071:20 2073:11 2103:2 2114:1 2135:2 2141:2 2143:1 2145:6,17 2146:10 2148:10,20 2152:17 2164:1,4,7,13 2167:19,22 2168:20 2169:12 2170:7

relatively [2] 2144:6 2147:5

relevant [2] 1979:22 2144:12

reliability [1] 1977:6

relied [2] 1970:10 2151:20

rely [1] 1985:21

relying [2] 2152:24 2165:1

remain [4] 2140:23 2145:11 2158: 16 2170:25

remaining [2] 1957:9 2098:10

remains [1] 2121:19

remedy [1] 1997:24

remember [8] 2051:11 2066:3 2099:22 2102:25 2109:24 2125:6 2143:24 2150:16

remembering [1] 2081:18

remind [1] 1987:25

remove [1] 2094:24

removes [2] 2055:3 2062:14

repeat [3] 2004:18 2102:21 2132: 17

repeatedly [1] 1975:18

rephrase [2] 1982:7 2155:25

replace [3] 2031:10 2043:18 2126: 9

replaced [4] 2031:13 2080:20 2125:12 2128:9

replacement [4] 2044:14 2126:13 2144:1,4

replaces [5] 2043:4 2044:3,6,7,15

replacing [3] 2044:2,17 2128:10

report [21] 1963:11 2018:22 2048: 6 2050:16 2054:8,9 2060:18 2065: 2 2077:14,17 2080:23 2126:22 2151:15 2165:6,11 2171:5,5,8,13 2178:9 2180:14

Reported [9] 1951:23 2004:14 2026:6 2051:5,6 2076:5 2177:9 2179:1 2182:14

reporter [2] 2097:13 2185:10

reporting [4] 2027:6 2029:21 2125:10 2171:15

reports [4] 2026:2 2154:13 2174: 18 2175:10

represent [5] 1977:24 2003:1 2064:23 2089:10 2134:5

representation [2] 2080:12 2155: 24

representatives [1] 1957:9

represented [1] 2006:18

require [5] 1975:25 2001:15 2009: 8 2095:7 2115:21

required [3] 1973:21 2001:9 2154: 13

requirement [1] 1974:8

requires [1] 2042:8

reread [1] 1994:22

rerun [1] 2050:22

reruns [4] 2044:19 2055:11 2160: 14,15

Research [18] 1958:23 1959:14,16, 25 1960:12 1965:19 1974:5 1988: 6 2012:25 2013:1,1,2,12 2019:6 2031:19 2062:2 2105:17,20

researcher [2] 1959:2,3

researchers [2] 2004:16,20

reset [1] 2125:2

respect [4] 1977:7 2102:14 2125:1 2126:16

respond [3] 2008:16,23 2018:18

respondent [11] 1966:22 1967:23 1968:3 1972:1 1985:3 1988:18

1995:20 2001:14,25 2002:1,2

respondent's [1] 1968:2

respondents [30] 1959:17 1962:9 1966:12,13 1968:7 1969:15,23 1971:7 1976:5,12 1978:24 1984:1, 3,5,13,21 1985:8 1988:1,10 1999: 2,7 2001:1 2002:9 2003:8 2004: 15,19 2005:6,11 2009:9,13

responding [2] 1998:11 2034:1

response [5] 1983:20 1985:17 2008:16 2044:24 2073:19

responses [2] 1964:15 2010:15

rest [1] 2057:4

restated [1] 2073:14

restatement [1] 2093:3

restrict [1] 2051:16

restricted [1] 1995:21

restrictive [1] 1957:12

result [7] 2050:17 2075:15 2079: 22 2084:25 2113:11 2152:16 2176:12

results [36] 1983:7 2018:18 2032: 6 2035:23 2041:12 2042:20 2051: 6,8 2055:14 2056:18,19 2057:6 2060:20 2061:21 2063:2,3 2065:6 2066:12 2079:18 2108:21,25 2109:4,20,22 2120:11 2121:3,4,18 2165:12 2177:7 2178:5 2179:11 2182:2,3,10,12

resumed [1] 2040:10

retained [1] 2147:11

retaining [1] 2145:4

retains [1] 2031:21

retransmission [14] 2023:8,10 2028:17 2048:24 2050:25 2057:3 2068:11 2089:22 2136:13,24 2137:22 2138:15 2142:14 2158: 13

retransmit [6] 2067:6 2098:14 2105:14 2136:10,15,20

retransmitted [4] 2147:2 2159:4 2161:4 2162:17

retransmitting [1] 2090:23

retrieve [1] 1965:25

reveal [1] 1972:3

revealed [1] 2104:4

revelation [1] 2104:3

revenue [12] 2138:16 2147:8 2150: 1,7 2165:11,19 2166:6,7 2167:5 2169:6,10,19

revenues [1] 2149:25

review [7] 1963:10,13 1983:2 2000:23 2001:15 2056:12 2176: 16

reviewed [14] 1978:4 1981:8,10 2003:5,9,10,14 2056:9,18,19 2066: 3 2071:7 2075:21 2176:18

revision [1] 2085:20

revisions [1] 2085:17

rid [1] 2158:12

right-hand [4] 2028:18 2029:23 2099:3 2126:12

rigorous [1] 2176:3

Ringold [2] 1981:6 2077:3

risk [1] 1995:7

RMR [1] 1951:23

ROBERT [2] 1952:3 1953:16

Robles [1] 1954:11

robust [1] 2058:16

role [9] 1959:7 1971:24 1972:9 2012:25,25 2107:2 2136:7 2143: 10 2163:23

RONALD [1] 1953:14

room [3] 1956:17,25 1957:9

rough [2] 2066:11 2120:22

roughly [1] 2110:17

rounding [5] 2053:15 2127:1,2 2128:6,6

routine [1] 2183:18

row [2] 2029:6 2032:12

royalties [12] 2007:10 2017:4,9,10 2028:25 2072:13 2086:10 2092: 13 2137:21,24 2138:7 2154:8

ROYALTY [38] 1951:1,7 1962:24 1963:1,5 1980:14 2020:16 2021: 10 2023:22,24 2028:22 2035:13 2036:6,22 2037:11,12 2039:5 2058:4 2070:22 2077:1 2091:2 2092:2,4,7,10,14,16,20,23 2093:2 2095:8 2103:5 2107:16 2137:5,25 2138:13 2170:13 2177:8

rules [2] 2068:12 2176:4

run [6] 1972:15 2056:16 2082:17 2083:23 2084:12,17

running [4] 1957:22 1969:22 2055: 19 2083:21

runs [1] 1995:6

rural [5] 2105:7,9,13,14,23

rutabagas [1] 1988:16

S

S.E [1] 1951:15

SA3 [1] 2098:19

salvage [1] 1986:5

same [46] 1974:18 1979:10 2020: 18 2029:19 2034:25 2044:1 2057: 18,21 2058:23 2060:15 2063:8,9 2073:14,15 2079:20 2080:7 2084: 2 2090:9,23 2091:20,20,22 2127:8, 17,18,19,19 2142:5,18,25 2143:13 2145:2,11,12,23 2148:5,11 2169: 12 2170:25 2171:24,25 2172:4,15, 15 2173:5 2174:24

sample [6] 1982:12 2016:10 2030: 17 2045:8 2054:6 2084:6

Sanders [1] 2032:22

satellite [1] 2154:20

SATTERFIELD [24] 1954:3,4 1956:12,13,14,23 1957:5,21 1958: 3,5 1962:14,20,21 1970:21 1977:1, 3,14,16 1978:7 2010:17,19,25 2011:2 2184:4

save [2] 2037:15 2098:15

saw [2] 2029:19 2180:22

saying [19] 1978:7 1993:1,23 1994:

1 1995:14,17,18 1998:9 2067:10
2115:24 2133:19 2146:4,11 2147:
1,18 2159:2,14 2169:8 2172:24
says [8] 1986:25 2006:8 2073:25
2076:18 2149:24 2154:23 2156:
17,23
scenario [2] 2090:13 2148:15
schedule [1] 2096:25
Scholer [1] 1952:8
School [1] 2012:13
science [3] 1958:16 2065:9 2074:
21
scientists [1] 1972:7
scope [2] 1968:7 1995:24
screen [5] 1957:23 2011:19,20
2033:7 2070:2
SDC [5] 2024:8 2027:15 2030:19
2041:25 2115:21
SEAN [2] 1952:4 2064:23
seated [5] 1956:4 1957:20 2011:
12 2040:11 2089:4
SEC [1] 2150:11
Second [16] 1964:11 1980:11
1989:21 2008:24 2027:9 2029:6
2032:12,17 2047:11,15 2049:7
2052:6 2054:3 2098:24 2099:1
2150:12
section [8] 2053:4 2067:3 2080:7
2136:22 2137:5 2143:13 2154:7
2161:21
see [65] 1980:16 1989:9 1990:2
1993:19 1997:16 2000:12 2014:
20 2021:8,11,13 2027:3 2029:4
2037:4 2053:16 2055:24 2062:23
2072:10 2074:22,22 2075:8,14
2076:18 2077:24 2079:1 2080:4,
14 2082:6 2097:2,5,6,9,10,15,18
2098:1,11,20,23 2099:5,17,19
2100:12 2112:14 2121:6,16 2125:
21 2129:10 2130:8 2141:3,15
2144:11 2148:13 2150:22 2151:6,
12 2154:18 2155:5 2156:10 2157:
20,20 2170:7 2171:20,21 2174:21
2180:24
seeing [1] 2171:20
seek [2] 2138:7 2166:9
seeking [1] 2089:15
seem [8] 1965:6 1987:24 1989:4
2005:4,5 2105:22 2146:14 2163:3
seemed [2] 2158:20 2160:9
seems [4] 1990:16 2009:17 2156:
8,9
seen [4] 2065:21,22 2115:10 2121:
4
Seinfeld [1] 2160:15
select [1] 2109:19
selected [4] 1968:10 1980:5 1992:
15 2109:13
selecting [1] 2003:22
self-administered [2] 2008:19,21
self-identify [1] 1962:4
self-run [1] 1972:19

selling [1] 2143:23
sense [14] 1961:16 1969:17 1971:
22 1973:25 1979:5,6 1980:4 2043:
17 2063:1 2105:1,23 2130:19
2158:25 2163:9
sensitivity [6] 2076:10 2109:5,6,
16 2128:16 2129:1
sent [2] 1961:18 2096:10
sentence [8] 1993:14 2074:9
2076:23 2149:14,24 2150:3 2154:
11,23
sentences [1] 2149:23
separate [7] 2031:5 2042:24 2055:
25 2083:21 2084:12,18 2172:11
separated [1] 2041:16
separately [4] 2029:23,25 2030:1
2042:14
September [1] 2016:2
serials [1] 1965:13
series [2] 1975:11 1977:8
serious [1] 1970:12
serve [1] 1961:22
served [1] 1961:24
serves [1] 2159:4
SESSION [2] 2089:1 2184:16
SESSIONS [1] 2184:17
set [6] 1957:23 2023:8 2053:1
2085:12 2101:25 2102:1
Settling [3] 1954:15 1955:2 2089:
10
Seventeenth [1] 1955:7
several [6] 1965:11 1973:6 1975:8
1977:20 2023:20 2037:2
severe [1] 1979:7
Shall [1] 1956:10
share [55] 1965:16 1996:12 2007:9
2020:12 2026:5 2029:8,11 2032:
12 2042:13 2052:18,19,19,21
2054:10 2060:8 2063:7 2067:20
2068:22 2072:3,11,12 2087:18
2091:22 2111:8,12,13 2113:5
2115:1,5,13,17 2117:7,8 2118:11,
15,23,25 2119:3,6,11,13,24 2124:
6,22 2125:3,19 2126:18,21,22
2128:7 2137:8,24,25 2172:12
2178:25
shares [31] 2018:16 2025:2,20
2026:17 2028:13,17,18 2030:1
2034:12,19 2043:1 2048:5 2052:1
2060:6 2063:9 2067:25 2111:6,15
2113:3,15,17 2118:20 2128:2
2170:13,18,19 2171:1,15 2172:10,
25 2177:8
Shaw [1] 1955:6
sheep [2] 1992:10 2004:7
shouldn't [1] 2112:25
show [12] 1967:11,11 2000:6 2017:
21 2046:18 2060:25 2065:18
2080:8 2160:20 2166:14,18 2180:
9
showed [1] 2073:11
showing [5] 2061:2 2072:22 2075:

18 2079:23 2086:12
shown [3] 1965:19 1968:5 2001:1
shows [8] 2005:15 2050:12 2053:
6 2060:22 2069:23 2098:9 2163:
15 2165:18
Shum [1] 2183:9
side [7] 1963:22 2029:23 2106:13
2122:2,3,4 2152:19
sides [1] 2107:19
signal [99] 1964:4,13,16,24 1965:
17 1966:5,6,7 1969:13,14,16,22
1970:1,20 1976:8,18,19 1982:16,
19 1983:15,17 1992:24 2002:3
2006:1,6,17 2007:4 2021:5,8,11,
13 2031:14 2032:1,2 2037:6,7
2038:22,24 2039:3,7 2047:4,4,5
2059:9 2061:11 2067:13 2069:9
2070:21 2075:23 2078:20,20
2081:9 2082:4 2090:12,23,24
2091:7,9,25 2093:15,17,24 2094:4,
25 2095:10,12 2100:22 2101:11
2102:10 2103:9,19 2104:4,23
2105:12,15 2106:6 2107:10,15
2117:20 2129:3,14,18 2130:1,1,25
2136:21 2139:9,21 2143:10 2144:
24 2148:1,1 2152:12,18 2157:14,
24 2159:17 2166:19,22
signals [137] 1964:21 1965:14
1969:5,11,18 1976:5,6 1978:11
1984:7,8,10 1992:21 2000:9 2001:
23 2020:14,15,17 2022:18 2023:9,
11 2024:6,7,9,10 2025:25 2027:13,
14,16 2028:7,9 2030:16 2031:4,6,
9,11 2037:12,14 2041:23,24 2042:
5,11 2046:8,16 2049:13,14,19
2050:5,15 2053:8 2054:11 2055:
16 2066:25 2067:4 2068:6,9,14
2069:1,4,17,17,19 2071:14,19,21
2072:2,13,15 2073:9,12 2075:9,19
2076:6,19 2078:7 2081:17 2089:
22,23,25 2090:2,5,9 2091:13,13,
16 2094:19 2095:17 2101:2,6,18,
24 2116:1,4,8,18,23 2129:7,9
2130:13,16,18,21,23 2131:2,14,23
2139:17 2140:20,22 2141:5 2144:
16 2145:9,16 2148:4,9 2150:4
2152:16 2157:2 2158:4,9,16 2159:
15 2163:11 2164:7 2166:8 2167:1,
7,12,22 2168:3,7,15,18 2169:1,18
2171:4 2175:23 2176:12
Signature [1] 2185:10
significance [7] 2121:4,5 2123:10
2180:13 2182:1,13,18
significant [13] 2055:7 2110:4,12
2113:4 2114:13 2121:20,21 2122:
6,15 2180:1,20 2181:9,15
significantly [5] 2001:14 2099:25
2100:11 2101:24 2124:1
signify [1] 2093:5
signifying [1] 2093:4
Silberberg [1] 1953:8
similar [5] 2020:7 2059:24 2063:8

2065:11,11
similarity [1] 1976:18
simply [2] 2082:21 2162:18
since [3] 2019:10 2095:9 2164:21
single [6] 2079:4,4,13,14 2080:9
2095:22
sir [3] 1993:17 2007:23 2075:13
sit [3] 1956:9 1957:14 2011:7
sitting [1] 2146:2
situation [4] 1969:2 2111:20 2160:
1 2162:16
six [3] 1989:22 2098:21 2099:15
size [2] 1966:3 1982:12
skepticism [1] 2004:24
skill [1] 2185:4
slide [7] 2017:21 2018:25 2032:19
2072:5 2073:23 2077:12 2087:16
slides [2] 2017:16 2033:11
slightly [2] 1975:15 2081:16
slots [1] 2170:1
slow [2] 2008:17 2147:16
small [11] 1964:4,9 1966:11 1970:
18 2042:5 2046:16 2068:23 2105:
24 2168:4 2174:6 2178:2
smaller [1] 2091:25
smart [2] 2161:16 2173:9
snake [1] 1957:13
Social [3] 1958:23 1972:6 1996:8
solution [1] 1986:8
solved [2] 1997:12 2040:12
somebody [1] 2132:11
somehow [1] 2108:17
someplace [1] 1960:7
sometimes [2] 2003:18 2021:14
somewhat [1] 2062:18
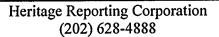**somewhere** [1] 2117:5
soon [1] 2144:14
Sorry [30] 1956:5 1971:4 1975:13
1990:6 2001:25 2005:23 2014:7
2039:19 2062:11 2064:7,12,14
2069:25 2074:10 2077:18,25
2094:11 2097:14,14 2102:20
2104:12 2118:12 2120:6,8,10
2149:21 2153:19 2155:8,11 2174:
25
sort [34] 1962:4 1966:11 1967:12
1968:6 1971:5,23 1972:8,9 1973:
3,13 1980:6 1982:13 1991:7 1992:
13 2001:17 2031:12,20 2046:20
2069:2 2075:2 2084:8 2094:16
2104:9 2113:6 2120:21 2123:21
2128:4 2129:23 2147:16 2159:2,4
2160:22 2173:6 2174:22
sought [1] 2163:17
sound [2] 1956:6 2056:23
sounds [5] 1983:10 1998:10 2000:
10,10 2146:25
sour [1] 1991:21
source [7] 1972:17 2049:18,21
2050:2,4,7 2060:16
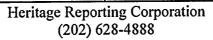**sources** [2] 2150:9 2167:9
speakers [1] 1956:8

speaking [1] 2147:6
speaks [1] 2105:19
special [6] 2031:20 2140:25 2142: 20 2144:18 2158:10 2166:22
specialty [2] 1962:5 2169:6
specific [4] 2003:11 2018:11 2039: 25 2171:9
specifically [3] 1993:24 1994:9 2008:8
specification [11] 2014:18 2048:8 2057:4 2058:22 2087:11 2110:6 2112:6 2131:7,8,10,11
specifications [1] 2035:22
specifics [1] 2065:13
specify [5] 2034:5 2048:15 2082: 25 2112:16,17
speculate [2] 2156:10 2164:16
speculation [1] 2155:20
spell [2] 1958:7 2012:1
spend [1] 2111:3
spent [1] 2164:21
split [1] 2084:6
splits [1] 2042:16
sponsored [2] 1963:14 2150:13
spontaneously [3] 1965:21 1990: 11 1991:2
Sports [29] 1952:2 1965:13 1977:7 1989:1 1998:3,16 2003:1 2024:6 2027:14 2031:13 2041:24 2052: 18 2064:23 2068:1 2079:23 2110: 22 2111:13,20 2112:4 2115:9 2116:17,22 2121:23 2144:23,24 2177:18,20 2180:1,19
Squire [1] 1952:14
stamp [3] 2151:12 2153:12 2154:1
stamped [1] 2164:23
stand [2] 2010:24 2161:14
standard [19] 1973:19,22 2043:16 2059:13 2110:8,18 2114:14,20 2118:19 2121:17,25 2170:24 2171:23,24 2172:1,7 2173:1 2174: 7,17
standards [1] 1973:24
standing [1] 2156:11
Star [2] 1990:17 2097:5
stars [2] 2123:15,17
start [12] 2018:24 2033:1,17,18 2040:5,24 2048:3,8 2094:12 2144: 14 2161:23,24
starting [3] 2033:20,23 2128:20
starts [1] 2149:14
state [3] 1958:6 2011:25 2013:23
statement [22] 2014:6 2015:14 2026:15,18 2038:16 2061:25 2071:12 2072:9 2074:25 2075:24 2093:3,7,20 2096:9,12 2100:19 2108:18 2118:6 2120:3 2147:15 2156:7 2178:8
statements [1] 2073:3
STATES [2] 1951:1 1976:7
station [20] 2103:19 2106:11,23 2107:21 2135:25 2136:1,2,10,15

2141:23 2147:1 2155:2,16 2156: 20,25 2157:9 2159:3 2161:6,8 2169:5
stations [21] 1997:11 2006:24 2049:1 2099:25 2100:11 2101:25 2103:11,12 2105:4,8,24 2107:24 2108:3,7 2119:8 2152:14 2157:7 2161:4,24 2162:12 2163:22
statistical [13] 1960:13 1966:16 1971:20 1985:22 2112:13 2121:3, 5 2123:9 2124:8 2179:8 2182:1, 13,17
statistically [24] 2055:7 2110:3,12, 25 2113:2,4,11,14,18,23 2114:12 2115:11 2121:14,20,21,23 2122:6, 8,11,14 2180:1,20 2181:9,14
Statistics [4] 1960:11,13 1962:1 2174:21
statutory [8] 2135:20,23 2139:15 2154:9 2155:1,15 2156:8,18
stay [2] 2159:20 2163:13
STELA [9] 2045:20 2046:3,4 2047: 11 2058:25 2059:1 2154:10,14 2173:10
stenographic [1] 2185:5
step [4] 2044:4 2112:13,16,17
stepping [1] 2019:4
STERNBERG [1] 1954:17
Steven [1] 1996:7
STEWART [1] 1952:19
stick [1] 2034:9
still [17] 2039:1 2059:15 2108:15 2111:23 2112:11 2116:15 2126: 24 2128:12 2142:25 2149:6 2163: 10 2167:6,7 2168:3 2169:11 2176: 25 2181:8
stood [2] 2010:23 2183:3
stop [2] 2027:9 2037:15
straightforward [1] 1994:14
strange [2] 1964:17 1977:19
stream [3] 2166:9 2169:19 2170:3
streams [1] 2138:16
Street [7] 1952:15 1953:9,19 1954: 5,19 1955:7 1996:8
strengths [1] 2074:24
STRICKLER [65] 1951:11 1970:23 1971:1,4,14 1972:11 1973:16 1974:7,14 1975:13,16 1976:2 1983:25 1984:12,24 1985:12,23 1993:8,11,19,21 1994:16,24 1995: 11,14 1996:2 1998:5,23 2007:19, 21 2008:1,25 2009:12,20,23 2010: 1,8,16 2011:15 2077:16 2096:3,6 2117:11 2118:2 2123:8,18,23 2127:8,16,20 2133:2 2140:5 2143: 24 2146:23 2147:17 2153:4,17,21 2157:22 2158:17 2159:23 2161: 19 2162:11 2164:18 2183:16
strikes [1] 1964:17
strong [3] 2009:5 2018:22 2087:3
structure [1] 2049:23
studies [9] 1963:18 1968:20 1972:

23,23 1975:5 1977:6 1991:23 2019:25 2065:6
study [5] 1967:4 1969:2 1970:10 2004:12 2005:14
stuff [5] 2105:25 2140:15 2148:5, 12,12
subgroups [3] 2099:1,3,7
subject [1] 2136:25
submission [1] 2150:11
submit [4] 2113:20,21,24 2154:15
submitted [3] 1961:19 2027:4 2175:25
subscriber [34] 2021:6 2037:7 2038:22,24 2041:8,14 2046:8 2057:14,14,23,24 2058:4,7 2059:7 2091:7 2093:22 2097:20,21,24 2098:3,10,22 2099:13,15 2100:18 2101:1 2102:11 2131:22 2137:8 2173:8,14,17,22 2174:13
subscriber-driven [1] 2143:18
Subscriber-Weighted [2] 2078:6, 9
subscribers [26] 2031:22 2034:9 2062:5 2078:11,18,22 2091:2 2092:3 2093:25 2094:22 2095:7 2101:3 2116:11 2128:20,22,25 2129:2,5,7,21,22 2130:11,24 2145: 4 2147:6 2154:20
subscription [4] 2147:10,10,11 2169:5
subscription-based [1] 2062:6
subscriptions [2] 2150:1 2160:21
subsequently [2] 1975:7 2026:8
subset [1] 1966:11
substantial [1] 2150:2
substantially [3] 2155:3,17 2156: 20
substantive [1] 1960:2
substituted [1] 2051:22
subtraction [1] 2133:15
suffer [2] 1979:10 2008:18
sufficient [1] 1976:17
sufficiently [2] 1970:6 2160:14
suggesting [3] 1972:16 2010:11 2085:5
suggestions [1] 1973:13
suggests [4] 1967:18 1968:19 1969:19 1983:19
suitable [2] 2065:2,5
Suite [3] 1954:5,11,19
suited [2] 1980:13 1981:13
sum [10] 1980:13,19 1981:4,17 2045:20 2052:18 2053:3 2063:13 2071:19 2173:23
summary [5] 1958:13 2012:8 2170:20 2182:9,14
super-atypical [1] 1991:6
super-competitive [1] 2169:25
superior [1] 2087:8
Supplier [5] 2024:8 2030:19 2031: 3,11 2032:1
Suppliers [24] 1953:2 1977:24

1998:16 2027:15 2068:1 2069:18 2081:10 2086:4 2114:4,5 2116:18 2121:15,21 2122:5 2124:5 2134:5 2150:23 2171:19 2177:8,10,19,20 2178:5 2179:14
Suppliers' [12] 2041:18,25 2042: 12 2086:21,24 2115:15 2117:19 2178:9,13,17,25 2179:5
supply [7] 2126:8 2152:19 2156: 24,25 2157:5 2169:24 2170:1
supported [1] 2154:16
supports [1] 2055:19
surfing [1] 1958:1
surprise [1] 2062:17
surprised [2] 2123:21 2158:21
surprising [3] 2031:17,25 2116: 25
survey [87] 1959:2,4,6,10,17,18 1960:12,15 1962:8,9,10,12,15 1963:14,21 1964:5,7,23,24 1966: 10 1967:17 1972:6 1973:9,20 1974:3,16,18,21 1975:16,20 1976: 5,12 1980:5,13,19 1981:5,8,13,18, 19,23 1982:24 1983:6,20 1984:1,2, 3,5,13 1985:15,25 1986:1,2 1987: 19 1988:6 1992:4,5 1994:20 1999: 2 2001:5,9,10,22 2003:7,12,18,20, 25 2004:15,16,20,21 2005:6,8,13 2008:9 2009:10,13 2066:12 2071: 19 2072:3 2073:10 2075:11 2077: 2,6 2134:22 2150:13
survey's [1] 2003:4
surveyed [1] 1982:21
surveyors [1] 1972:13
surveys [25] 1959:23,24,25 1960:4, 15 1963:23,24 1966:17,20 1968:9 1977:12 1978:5,9,22 2004:19 2005:19 2007:1 2008:6,19 2009:1 2010:6 2077:8 2134:9,10,13
suspicions [1] 1971:10
Sustained [4] 2019:19 2033:8 2073:3 2156:12
SUZANNE [1] 1951:9
sworn [2] 1957:18 2011:10
sympathetic [1] 2163:8
syndicated [2] 2160:14 2161:2
synonymous [1] 2138:25
system [74] 1956:6 1964:24 1982: 14,15 1984:13 1999:3 2001:19 2002:2 2021:5,8,13,15 2023:22 2038:18 2046:24 2057:25 2058: 12 2083:9,16 2089:24 2090:9,10, 11,14,16,17 2091:2,15,24,25 2092: 3,9 2093:22,24 2094:5,20,22 2095: 5,7,9,12 2098:4,13 2100:20,21 2102:2,14,14,15,23 2103:3,5,5 2104:25 2105:2,7 2106:11 2107:9 2129:13 2136:16 2137:22 2139:7 2149:25 2157:25 2158:23 2160: 22 2161:1 2166:24 2168:12,24,25 2172:23 2173:16 2175:4
system's [2] 2129:8 2166:20

system-fixed [1] 2057:5
system-level [1] 2129:16
systematic [1] 1970:19
systematizes [1] 2021:16
systems [78] 1964:3,7,8,12,19
 1969:3,3,12,21 1976:18,19 1981:
 25 1982:6,10,21,24,25 1983:9,14
 1985:1,9 1986:2 2006:1,5,16,19,
 23 2020:14 2023:9,10 2028:25
 2030:4,8,10,13,15 2031:19,24
 2039:13 2044:20 2045:2,9,11,16
 2046:7,12,17 2047:10 2058:14
 2062:2 2066:20,23 2067:2 2078:
 13 2083:13 2089:21 2090:8,22,25
 2091:13 2104:5 2106:9 2107:3
 2108:7,11 2115:20 2134:17 2140:
 17 2143:18 2148:6 2150:6 2152:
 14,21 2157:3 2161:15 2169:23
 2174:1,4

T

tab [2] 1986:24 2151:17
table [54] 1991:12,18 2016:7,7,9
 2027:1 2028:15 2029:5,16,18
 2030:3 2032:13 2050:12 2051:6,
 12,14,15 2052:14 2053:4 2069:21
 2070:2,2,5,6,7 2076:21 2077:10
 2078:5 2079:9 2085:2,18 2086:11
 2114:9,10 2115:4,4 2120:3,6
 2123:12,17 2125:24 2127:13,14,
 22,22 2153:9 2166:12 2171:13
 2172:5 2176:24 2178:20,20 2180:
 10 2182:8
tables [4] 2026:24 2060:20 2127:
 11 2180:13
tackle [1] 2170:6
tackled [1] 2019:8
tailored [1] 2159:19
takeaway [1] 1963:17
talked [6] 2024:20 2037:4 2093:10
 2168:13 2177:5 2180:8
talks [2] 2046:9,10
tap [1] 2183:18
targeting [1] 2046:15
task [7] 1969:24 1980:14 1981:13
 1983:20 2008:16 2009:7 2062:22
TBS [1] 2166:17
teach [3] 1959:9,10 2013:2
teaching [1] 2012:25
team [1] 1998:16
technical [2] 2000:15 2106:13
technically [1] 2047:1
technique [1] 2052:10
technology [1] 2011:16
telecommunications [1] 2013:
 13
telephone [9] 2001:5,9,22 2008:4,
 8,13 2009:1,9 2010:5
Television [18] 1952:18 1953:13
 1965:15 1966:6,7 1969:4,4,14
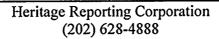 1977:8 1979:2 1984:14 1996:13,
 18,23 2049:21 2122:11 2165:19
 2175:25

Television-only [1] 1983:9
temporary [1] 2064:14
ten [1] 2070:12
tend [2] 1960:3 2172:25
Tenth [8] 1953:19 2021:7 2037:9
 2047:5 2059:8 2091:10 2093:18
 2181:3
term [5] 2009:5 2037:25 2039:11
 2084:1,8
terms [3] 2045:12 2102:25 2163:
 25
test [3] 2112:14 2129:1 2179:8
testified [5] 1957:19 1971:11 1978:
 3 2011:11 2050:21
testify [1] 2183:13
testimony [73] 1957:10 1960:23
 1963:10,13 1970:14 1972:22
 1978:5,6 1980:10 1983:3 1985:25
 1986:10 1987:9 1989:13 1990:1
 1993:12 2003:5,11 2005:18,22
 2007:23 2016:1,3 2017:14,23
 2020:4 2026:13 2028:8 2032:22
 2043:6 2046:9 2049:5 2051:10
 2065:15,25 2066:18 2070:18
 2071:7 2073:18,25 2074:3,12
 2075:21 2076:10,15 2077:11
 2085:2,4,19 2087:2 2093:10 2094:
 9 2101:21 2106:3,20 2109:3 2132:
 16 2134:25 2135:4 2149:12 2151:
 21 2152:9 2163:1 2165:15 2172:2,
 16,18 2173:12 2176:18,25 2180:
 11 2182:8,15
tests [3] 2109:5,7 2128:16
Texas [1] 2049:2
text [1] 1986:14
Thanks [3] 2005:16 2070:15 2133:
 1
theory [6] 2033:21 2036:11 2043:
 17 2082:16 2089:20 2098:13
there's [48] 1972:17 1976:9 1985:
 16 1986:8 1995:19 2004:23 2008:
 15,15,23 2021:9,12,15 2030:10
 2035:11 2036:15 2037:5,24 2038:
 3,14 2045:2,3 2054:9 2091:1,14
 2092:1 2103:22,22 2105:11 2123:
 7 2127:3 2130:7 2132:2 2139:16
 2144:16 2146:12,12,13 2147:4
 2159:2,10,24 2162:21 2163:3
 2168:10 2169:14 2173:20 2176:8
 2179:7
they'll [2] 2161:7 2169:4
they've [2] 1975:7 1988:23
thinking [8] 1968:2 1975:7 1989:7
 1995:7 2035:21 2116:6,21 2164:1
thinks [2] 2156:13,15
third [4] 2021:7 2040:3,21 2155:20
though [12] 1969:9 2000:2 2039:
 18 2090:22 2110:11 2111:19
 2113:22 2115:9 2119:23 2143:12
 2146:25 2160:9
thoughtful [2] 1963:25 2008:17
thousand [1] 2028:2

thousands [2] 2027:24 2109:24
three [9] 1956:24 1959:1 2017:14
 2069:15 2097:19,21 2098:10
 2180:22,24
three-quarters [3] 2037:8 2078:
 21,22
throughout [1] 1976:6
thrown [1] 1986:4
tight [1] 2181:1
time-fixed [1] 2084:4
timing [1] 2088:6
tiny [2] 2119:7,7
title [1] 2114:10
titles [1] 2051:19
today [10] 1956:17 1958:11 1970:
 15 2012:5 2017:23,24 2134:8
 2174:4 2177:5 2183:12
together [12] 1965:11 2024:9
 2042:1 2056:25 2060:6 2158:4
 2159:15,20 2161:4,25 2163:13
 2164:11
Toledo [1] 2097:25
tomorrow [1] 2183:6
took [2] 2119:15 2157:11
tool [2] 2042:6 2059:16
top [17] 1974:11 1993:17 2008:3
 2028:14 2029:18 2030:3 2038:23,
 25 2051:16 2052:17 2053:4 2060:
 22,25 2061:2 2095:2 2099:2 2100:
 10
topics [1] 1975:15
toss [2] 2034:16 2045:6
total [4] 2006:23 2023:24 2129:6
 2132:1
totals [1] 2173:16
touched [1] 1970:14
Tourangeau [4] 1986:15,16,17,17
tradeoff [1] 2068:21
traditionally [2] 1963:6,7
transaction [14] 2136:4 2140:4
 2141:19 2142:6,12 2145:20 2158:
 3,19,22,24 2159:12 2160:19 2161:
 10 2163:7
transcript [1] 2185:4
transformation [2] 2036:4,18
transformations [5] 2034:23,25
 2035:17 2036:3,10
transforming [1] 2035:10
translate [1] 2172:9
translates [1] 2042:25
transmission [2] 2142:15 2144:
 15
transmitted [2] 2101:2,18
transmitting [1] 2105:12
Trautman [2] 1963:11 1995:5
Trautman's [3] 1993:15,24 2003:
 10
treated [1] 1964:15
treating [1] 2048:25
treatment [3] 2030:22 2055:22
 2172:21
treats [1] 2042:21

trends [1] 2054:7
trial [3] 1972:15 2040:10 2183:22
tried [2] 1980:2 1981:1
trouble [1] 2163:5
True [15] 1958:3 1961:5 2014:25
 2015:20,21 2016:14 2034:23
 2044:3 2063:18 2085:11,13 2096:
 1 2162:5 2174:7 2185:3
truthful [2] 2004:17,21
try [8] 1969:2 1972:8 2020:22 2071:
 20 2095:19 2113:2 2148:3 2162:
 25
trying [10] 2000:19 2035:8 2102:24
 2119:12 2132:10 2141:21 2143:
 19 2145:25 2147:21 2160:24
Tuesday [1] 2183:23
turn [15] 1970:23 1986:9 2007:22
 2011:16 2014:2 2139:14 2151:2
 2152:7,8 2153:1,3 2164:22 2172:
 17 2176:24 2178:19
turning [1] 2175:13
turns [2] 2173:25 2174:1
TV [6] 1957:23 2101:24 2127:11,23
 2177:22,22
tweaks [1] 2164:2
two [35] 1960:4 1965:8,13 1972:10
 1978:21 1981:10 1998:11,12
 2011:13 2024:1 2041:13 2046:21
 2048:6 2050:24 2061:14 2079:16
 2080:20 2083:21 2084:12,17
 2090:8 2091:12,13 2097:17,20
 2098:21 2110:1,18 2138:6,16
 2143:15 2146:12 2150:9 2151:3
 2177:16
two-thirds [1] 1987:1
type [10] 1959:14 1965:20 1975:6
 2013:9,9 2058:15 2059:23 2101:
 18 2129:15 2141:11
types [10] 1965:12 1978:21 1994:5
 2052:25 2058:20 2065:6 2090:5,6
 2101:11 2146:22
typewritten [1] 2065:23
typical [4] 1967:25 1968:1 1972:5
 1990:22
typicality [2] 1980:7 1992:18
typically [2] 1960:1 1965:21

U

U.S [15] 2013:20 2022:18,23 2024:
 10 2026:1 2027:16 2028:9 2029:
 12 2031:6 2055:15 2057:4 2068:6,
 8,14 2171:3
ultimate [1] 2113:7
ultimately [2] 2049:19 2115:22
Um-hum [14] 1982:2 2066:13,22
 2079:2 2085:22 2086:15,25 2096:
 14 2097:4,11 2110:13,13 2125:23
 2155:6
unable [1] 1982:17
unallocated [1] 2174:5
uncertainty [5] 2039:9 2045:3
 2059:14 2174:15,20
uncommon [1] 2101:5

uncover [3] 1971:24 1972:8 1973: 4

under [15] 1976:8 2014:24 2016: 14 2017:5,8 2038:19 2067:6 2078: 24 2085:11 2126:20 2135:20,23 2139:21 2154:8 2183:16

under-estimate [1] 1999:17

under-value [1] 2178:5

underestimation [1] 1966:2

undergraduate [1] 2013:18

underlying [2] 2072:10 2074:4

undermines [1] 2041:10

undermining [1] 2035:19

understand [25] 1968:7 1969:23 1970:3 1995:9 1998:8 1999:11,23 2000:7,20 2006:21 2008:25 2017: 4 2020:25 2026:25 2034:14 2039: 21 2049:24 2064:25 2075:6 2082: 14 2095:1 2106:10 2109:25 2135: 21 2145:25

understanding [24] 1959:17 1962: 23 1963:3,6 1973:19 1984:20 1999:5 2017:1,8,10 2046:6 2067: 5 2068:4 2069:13 2072:4 2073:1, 7 2074:5 2075:7 2133:8 2135:3 2137:18 2138:2 2139:10

understood [2] 2001:3 2073:20

undervalues [1] 2179:4

undervaluing [1] 2178:16

unexpected [1] 1980:3

unfamiliar [2] 1988:18,21

unified [1] 2163:11

uniform [1] 1981:15

uniformly [1] 1974:6

unintentional [1] 2123:19

UNITED [2] 1951:1 1976:7

University [9] 1958:18,20,22,25 1960:7 2012:11,13,18 2013:24

unless [3] 2051:17 2117:4 2126: 22

unlikely [2] 1973:4 2000:18

unnatural [12] 1965:24 1967:15 1979:1,8,14,19 1997:5,10 1998:8 1999:1,12,18

unobserved [1] 2058:17

unregulated [5] 2140:8,10 2141: 22 2162:14 2168:2

unsure [1] 1988:3

until [4] 1960:10 2013:6 2183:6,20

unusual [2] 1989:1 2005:5

up [46] 1956:8 1985:17 1986:14 2022:9,11 2023:17 2027:2 2029:2, 17 2030:24 2037:2 2038:9 2039: 23 2051:9 2063:8 2069:10 2072:5 2077:11 2078:11 2084:6 2094:10, 14 2096:1 2099:23 2104:1 2111: 16 2115:16 2117:6 2119:7 2124: 10 2129:25 2144:25 2156:11 2157:8 2165:23 2167:24 2173:14, 15 2175:4 2177:18,19,20,21,22,24 2183:4

up-front [1] 1997:15

updated [4] 2026:17 2171:1,2,6

upper [3] 2095:3 2118:19 2119:16

useful [3] 2066:9 2109:16,17

user [1] 2144:18

uses [11] 1963:5 1998:7 2018:24 2051:20,21 2057:4,24 2060:15 2129:16 2130:5 2133:10

using [20] 1959:21 1960:14 2003: 17 2026:17 2043:2 2044:20 2052: 4 2055:1 2057:8 2070:21 2083:22 2087:13 2113:18,22 2119:23 2126:10,12,12 2173:9 2175:24

utilize [2] 2175:16 2176:13

utilized [1] 2001:11

V

valid [4] 2018:13 2043:3,22 2045: 10

validity [2] 1977:5,6

valuable [7] 2086:4 2160:3,5,14 2161:14 2162:2,8

valuation [8] 1966:5 1970:19 2019:3 2032:8 2043:15 2072:14 2075:23 2169:16

valuations [3] 2021:22 2050:19 2143:11

value [146] 1963:8 1964:16,19,20 1965:7 1968:12 1969:15 1970:11 1976:4,12 1978:10 1982:17 1983: 8,18 1984:22 1986:3,4 1989:25 2005:20 2006:25 2007:3,6 2017: 12 2018:1 2019:16 2020:13 2021: 12,15 2022:5,22 2024:3 2025:14, 17,17 2028:11,12 2029:10,24 2030:6,21 2031:3,5,8,14,24 2032: 2,9 2038:7 2045:15,23 2049:3 2052:23 2053:6 2054:5 2059:17 2061:24 2062:3,4,9 2063:16,18 2065:3 2069:24 2070:9,11,13 2071:20 2073:11 2085:8,24 2086: 1,13,17,23 2089:22 2090:1,7,17, 20 2091:1,14,25 2092:5,8,11,13, 15,17,19,21,24,25 2093:4,5 2094: 18 2095:12,21 2102:25 2103:2 2104:8 2113:7 2114:1,17 2115:7, 16,25 2116:13,14,22 2119:8 2129: 24 2133:15 2135:2 2140:23 2141: 2,10 2142:12,14 2143:1,8 2145:2, 6,17 2146:10 2147:5 2148:10,12, 13,18,21 2152:17 2159:22 2162: 21 2163:3,17 2164:1,4,8,13 2166: 4,10 2167:15,20,23 2168:20 2170: 8

valued [1] 2116:3

values [7] 1965:4 2039:15 2070: 21 2090:11 2102:15,23 2131:25

valuing [1] 2143:11

variable [19] 2014:20 2023:21 2035:12 2036:7,13,14 2041:9 2083:9 2122:18 2123:1 2128:25 2129:4,24 2130:19,23 2131:2,3,13, 17

variables [16] 2023:25 2024:14,14,

16,18 2034:16 2035:1,10,11,18 2036:9 2041:1 2042:18 2081:1 2084:3 2131:18

variation [5] 2042:8 2084:9,23 2091:12 2107:22

variations [1] 2108:12

variety [1] 1959:10

various [7] 1962:25 1963:1,9 2018: 9 2046:17 2129:19 2163:18

vast [1] 1964:11

vegetable [1] 1968:18

vegetables [2] 1968:16 1988:15

venture [1] 2106:15

version [1] 2077:1

versus [6] 2079:4,13 2080:2,9 2107:14 2119:11

VICTOR [1] 1954:9

view [20] 1985:3 1991:5 1997:3,8 2007:8 2035:25 2054:13 2056:22 2059:15 2060:3 2082:24 2092:7 2095:15 2107:1 2116:24 2140:9, 25 2163:11,20 2166:12

viewed [4] 2099:25 2100:11 2101: 24 2167:10

viewer [2] 2117:18 2166:17

viewers [4] 2142:21 2146:17 2148: 6 2150:4

viewership [1] 2144:6

viewing [9] 2143:7,9,17 2145:10 2146:3 2147:23 2148:1 2168:3,7

viewing-based [1] 2167:7

views [3] 1963:17 2061:21 2135:8

violates [1] 2004:4

VOLUME [1] 1951:20

W

Wait [2] 2064:5 2153:9

waived [1] 1957:3

Waldfogel [4] 2043:7 2055:5 2101: 22 2105:18

Waldfogel's [3] 2026:6 2043:11 2066:9

Waldfogel-style [1] 2048:20

wanted [4] 1956:16 2001:7 2066:5 2158:6

wants [6] 2135:24 2136:10,20 2137:21 2144:24,25

WARLEY [1] 1955:4

warrants [1] 1976:1

Wars [1] 1990:17

Washington [12] 1951:16 1952:10, 16,24 1953:10,20 1954:6,20 1955: 8 1960:11 2013:20 2069:8

watch [1] 2166:18

watching [4] 1998:17 2117:18,23 2143:22

wavering [1] 2147:16

way [33] 1956:9 1963:24 1964:22 1966:12 1971:10 1979:21 1985: 18 1987:1 1998:22 2001:21 2010: 2 2021:17 2066:11 2073:20 2109: 2 2117:16 2118:21 2119:21 2128: 2 2130:4 2132:20 2138:25 2148:5

2157:4 2158:7 2159:8,14,20 2162: 3 2169:1 2173:9 2174:24 2175:2

ways [7] 1959:12 1998:12 2038:13 2066:10,11 2157:19 2163:19

weaknesses [1] 2074:24

web [2] 2008:5,19

weigh [1] 2007:11

weighted [1] 1983:6

weighting [2] 1983:6 2055:3

well-established [1] 1966:9

Wharton [1] 2012:13

whatever [2] 1972:15 2162:13

whenever [2] 2112:12 2134:11

whereas [1] 1998:15

Whereupon [4] 1957:16 2011:8 2088:8 2183:22

whether [27] 1967:20,22 1971:6 1973:20 1978:8 1980:13,19,23 1981:12 1988:3 1990:9 1994:17 1995:2 1997:17 2000:13,16 2043: 10 2065:5 2067:7 2083:9 2095:25, 25 2102:10,10 2104:11,13 2179: 25

who's [2] 1983:25 2117:18

whole [3] 2047:6 2159:22 2161:3

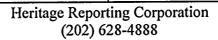wholes [1] 2163:12

wide [2] 2110:11 2111:2

widely [3] 1971:19 2009:6 2101:7

wider [6] 2045:3 2174:17 2175:10, 12 2181:7,8

widespread [2] 1973:11,18

will [34] 1968:19,22 1972:7,8 1990: 9 1997:6 2000:16 2018:4,7,10 2025:2 2039:11 2040:12 2064:17 2074:16 2078:1 2080:11,22 2088: 6,7 2106:17 2147:12,20 2148:13 2150:18 2162:23,23 2167:13 2169:4,6,9 2172:25 2176:19 2183: 19

willingness [6] 2021:1,18 2025: 11 2031:2 2103:1 2140:25

wind [1] 2111:16

Winthrop [1] 1955:6

wire [1] 1956:6

wires [1] 1957:22

within [7] 1989:22 1994:5 2008:23 2043:16 2046:16 2058:12 2106: 23

without [11] 1980:6,6 1992:15 1999:15 2061:4 2063:11 2117:7 2128:4 2132:6,25 2133:20

witness [71] 1956:15 1957:2 1970: 24,25 1971:13,16 1972:21 1973:1, 23 1974:9,19 1975:23 1976:14 1978:20 1984:3,23 1993:18,20 1994:11,22 1995:1,13,18 1998:21 2002:18 2007:25 2008:11 2009:4, 17,22,25 2010:7,10,22,23 2011:1, 3,4,15,20 2027:22 2036:4 2053:5, 11 2064:12 2074:16 2077:18 2106:21 2117:15 2123:11,20 2127:15,18,24 2133:7 2140:9

2144:8 2147:14,19 2155:10 2158:
2 2159:13 2161:12,23 2163:10
2182:21 2183:1,3,6,12 2184:2
wonderful [1] 2042:6
word [3] 1972:24 1996:25 2155:25
wording [6] 1969:24 1970:4 1974:
11 1975:24 1984:11 1985:21
Words [6] 1974:23 1982:8 2008:2
2087:3 2129:4 2130:6
work [27] 1958:21,22 1960:6,7
1993:6,7 2012:15 2013:17,19
2025:24 2056:23 2059:10 2061:
16,19 2113:8 2136:1 2137:4 2138:
6,7 2139:25 2141:16,22,24 2142:4,
15,16 2146:1
worked [10] 1960:10 1961:12
2013:20 2050:9 2075:8 2135:11,
12,14,16 2147:24
working [4] 1956:7 2091:9 2095:
16 2126:23
works [2] 2026:25 2051:4
world [4] 2004:24 2031:12 2045:
17 2134:14
worse [1] 2045:7
worth [8] 1976:22 2039:6,7 2054:5
2107:16,16 2162:19 2174:15
worthwhile [1] 2147:13
WPIX [1] 2161:6
wrapped [1] 2104:1
write [3] 1993:13 2048:16 2131:21
writing [1] 2156:1
written [20] 1960:23 1970:13 1972:
22 1978:6 2003:5 2005:21 2014:5
2015:14 2016:1 2020:4 2065:15,
25 2066:18 2070:18 2072:8 2077:
10 2085:2,4,18 2152:9

Y

year [12] 1992:24 2006:2 2030:1
2079:4,5,13,14,24 2080:9 2087:17
2165:12 2170:21
year's [2] 2087:13,14
year-by-year [1] 2029:15
year-specific [1] 2170:18
year-to-year [1] 2170:13
yearly [1] 2029:21
years [15] 1964:6,8 1974:24 1975:
1,18 2009:6 2013:21 2029:11,12,
22 2054:4,15 2079:10,11 2087:21
Yep [1] 1993:18
yesterday [1] 2096:10
yogurt [2] 1991:21 1992:1
York [4] 2012:18 2159:16,19 2161:
7
yourself [1] 1959:23

Z

zero [31] 1964:16,20 1965:7 1976:
4 1986:4 2007:3 2014:11 2030:16
2043:4,13 2044:10,16,17 2052:22
2053:22,23 2112:7,8,10 2124:9,14,
22 2125:3,9,12 2126:9,25 2127:14,
22 2128:9,10

zero/greater [1] 2043:13
zeros [2] 2044:7 2153:17
zone [51] 2023:8,10 2028:17,19
2048:24 2051:3,24 2052:13,16,16,
19,20,24 2053:8,10,21 2055:22
2056:1 2057:3 2060:2,5,5 2066:
21,24 2067:2 2068:10,11 2082:23
2083:10,13,17,20,23,23 2084:20
2086:3,21,24 2108:6 2120:19
2121:1 2123:2,4 2124:5,20,24
2125:17 2126:6 2127:4,10 2180:3
zones [1] 2051:1